



# Grandstream Networks, Inc.

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UCM63xx Series

**Wave Web User Guide**



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## CHANGELOG

### Firmware 1.0.13.6

- Made several UI improvements.
- Added ability to change date and time format. [Date/Time Format]
- Added Portuguese and Vietnamese language support. [Table 1: Model specifications for Wave Web] [Language]
- Added support for some specific models (DS-KV8113, DS-KD8003) door systems for Hikvision brand. [Door System]
- Added support for recording an ongoing Wave meeting. [Record an Ongoing Meeting]
- Meeting hosts can now view the list of invited participants that don't attend a meeting. [Invitees List]
- Added new feature for creating a chat group with the members of a previous meeting. [Meeting Chat Group]
- Added *Meeting Agenda* information to the *Meeting Details* page. [Figure 79: Scheduled Meeting]
- Added support for Call Flip function. [Call Flip Function]
- Added support for restricting visibility of chat history when inviting contacts to a group chat. [Add Group Members]
- Added support for viewing contacts based on UCM contact privilege settings. [CONTACTS] [Contacts]
- LDAP phonebook contact visibility is now based on the UCM's LDAP phonebook settings. [CONTACTS] [Contacts]
- Added support for displaying all the received and sent files in one list. [Files List]
- Added more emojis. [React with Emoji]
- Added support for emoji previewing when using emoji shortcuts. [Reply quickly with an emoji shortcut]
- Added support for changing the group chat name quickly. [Change Group Name]
- Added the ability to quickly invite other participants to a meeting. [Quickly Invite Participants]
- Added support to delete messages that failed to send. [Message Failed to Send]
- Up to 500 users can be selected when creating a group chat. [Start a Group Chat]

### Firmware 1.0.11.8

- Added Operator Panel function in Wave Desktop. [Operator Panel]
- Added Voicemail function in Wave Desktop. [VOICEMAIL]



- Added more functions in the Chat module. [React with Emoji]
- Added custom avatar function in Wave Desktop. [Custom Avatar]
- Added Help and Feedback module in Wave Desktop. [Help] [Feedback]
- Merged audio conference and video conference to Conference module. [Conference]
- Added chat bubble function during the meeting. [bubble function]

## **Firmware 1.0.9.10**

- Added support to login via user password, instead of the SIP password. [LOGGING IN TO GRANDSTREAM WAVE WEB PORTAL]
- Added support for Custom status on Wave web. [Custom Status]
- Added support for sending 5000 characters on chat. [Send Messages]
- Added support for sending Excel content. [Send Messages]
- Added support for edit sent text. [Edit the sent text]
- Added support for a member to host a meeting. [Host Meeting]
- Added support for sending DTMF under meeting. [DTMF]
- Added support to end meeting. [END MEETING]
- Added more account-related settings. [SETTINGS]
- Added support for more Applications. [MORE APPLICATIONS]
- Added support for virtual background. [Virtual Background Settings]

## **Firmware 1.0.7.12**

- Added support for an email reminder when editing the time of a scheduled meeting. [Email Reminder]

## **Firmware 1.0.7.9**

- Added New features in chat module: pin chatbox, mute message notice, hide chatbox, quote to reply message, delete messages. [Quote to Reply Message] [Pin Chat Box] [Hide Chat Box] [Delete Message]
- Supported multi-lines calls. [Multiple lines]
- Supported to transfer an active call to a video conference. [Transfer to Meeting Room]
- Added public meeting room list and the list will show the meeting room status in different periods. [PUBLIC MEETING ROOM]
- Added to create a meeting with a random meeting number. The meeting can be created as an instant meeting or scheduled meeting. [Meet Now]
- Supported adding participants from contacts/groups when scheduling a meeting. [Meet Now]



- Supported setting meeting subjects and adding invitees for instant meetings. [Meet Now]
- Added to display the actual meeting duration and actual participants list for the previous meetings. [MEETING ROOM]
- Added meeting assistant module. When there are new meeting invitations, meeting reminders, and meeting cancelation notifications, the meeting assistant will send messages to the host and participants. [Figure 81: Meeting Assistant Interface]

### **Firmware 1.0.5.4**

- Added chat functions, including single chat and group chat. []
- Support sending files, and @ for chat in meetings. [Send Messages]
- Support displaying customized LOGO. []

### **Firmware 1.0.3.10**

- Added favorite tab for Grandstream Wave contacts. [Contacts]
- Added reset password function. [Wave Password Recovery]
- Added Entrance Guard function. [Door System]
- Added the function of transferring a single call to a conference room. [DURING A CALL]

### **Firmware 1.0.0.25**

- This is the initial version.



# INTRODUCTION

## Overview

Wave web is a client application for the UCM63xx series IP PBX users to use a web browser to participate in web video/audio conferences and make calls via WebRTC. With Wave web client, users can easily create, schedule, manage, and join video conference calls, share presentations, chat during conference calls, register UCM extension and make point-to-point calls. Wave web helps enterprise users to join meetings and communicate efficiently. It is an ideal product for enterprises looking for tools for users to communicate and work productively.

## Feature Highlights

- Supports Google Chrome v75+ and Mozilla Firefox v70+.
- Native integration with UCM including contacts and ability to display SIP users' online status.
- Supports LDAP to access contacts in the UCM LDAP server.
- Supports call display, voicemail, and call encryption.
- Supports call history.
- High-quality point-to-point audio and video calling.
- Full integration with Grandstream UCM6300 IP PBX, including the creation of QR code for automatic login, call transfer, call recording from the server, etc.
- Supports Opus and G.722 for HD audio. Jitter resilience up to 50% audio packet loss and 20% video packet loss.
- Supports H.264.
- Supports joining the meeting via link without logging in.
- Supports scheduled meetings and meeting now at anywhere anytime.
- Built-in NAT traversal including automatic NAT discovery and TURN/ICE.
- Support basic chat functions, including single chat and group, chat, sending files and emoticons, starting audio conferences in a group chat, simultaneous group chats, and meeting chats.
- Integrated UCM user portal entry to access personal data, follow me settings, SCA, wakeup calls, etc.



## Specifications

Specifications and limitations of WebRTC change from one model to another, please find below a table showing the specifications for the features on each model.

**Table 1: Model specifications for Wave Web**

UCM630x series	Video feeds	Screen Share Feed	Concurrent user registration	Participant limit (Conference)
UCM6301	4 or 6 or 9	1	500	75
UCM6302	4 or 6 or 9	1	1000	150
UCM6304	4 or 6 or 9	1	2000	200
UCM6308	4 or 6 or 9	1	3000	300
UCM6300A	N/A	N/A	250	50
UCM6302A	N/A	N/A	500	75
UCM6304A	N/A	N/A	1000	120
UCM6308A	N/A	N/A	1500	150

Below are the rest of the technical specifications for all the models:

**Table 2: Wave Web Specifications**

<b>Protocols/Standards</b>	SIP RFC3261, TCP/IP/UDP, RTP/RTCP, HTTP/HTTPS, DNS (A record, SRV, NAPTR), STUN/TURN/ICE, SIMPLE, LDAP, TLS, SRTP, IPv6
<b>Voice Codexs and Capabilities</b>	Opus, G.711 A-law/U-law, G.722, G722.1 G722.1C, G.723.1 5.3K/6.3K, G.726-32, G.729A/B, iLBC, GSM, NetEQ, FEC 2.0, NACK Full-duplex speaker, AEC, AGC, Noise Reduction, PLC, Adaptive JIB
<b>DTMF</b>	In-audio, RFC2833, SIP INFO
<b>Video Codexs and Capabilities</b>	H.264, H.263, H.263+, H.265, VP8 1080P HD video supports displaying multiple videos, screen sharing, camera on/off, GS-FEC
<b>Telephony Features</b>	Call hold/unhold, mute/unmute, call transfer, audio meeting room, video meeting room, call history, scheduling meeting, voicemail, call recording, etc. User portal entries allow access for personal data, wakeup call settings, SCA, follow me settings, call queue, CDR, CRM user settings, etc.



<b>Chat Function</b>	Point-to-point chat/Group chat  Supports to send text, emoji, document, picture; Forward message, copy message, reply message; Pin/unpin chat window, hide chat window, message prompt tone settings.
<b>UCM Applications</b>	Supports UCM feature codes (transfer, call park, recording, meeting control options, etc.)
<b>QoS</b>	Layer 3 QoS (ToS, DiffServ, MPLS)
<b>Security</b>	SIP over TLS, SRTP (128-bit and 256-bit), HTTPS
<b>Multi-language Support</b>	English, Simplified Chinese, French, Arabic, Spanish, Portuguese, Vietnamese and other languages.
<b>Login</b>	Supports login with SIP extension and password. Supports joining meetings via link without logging in.
<b>Upgrade</b>	Wave Web client is built-in with UCM and upgrades via UCM.

Please visit our website for more Wave web information and product documentation:

<https://www.grandstream.com>



## LOGGING IN TO GRANDSTREAM WAVE WEB PORTAL

With the UCM SIP extension number and user portal password, users could log in to the Grandstream Wave web portal. After logging in successfully, users can host meetings, schedule meetings, manage contacts, make calls, transfer calls, chat during a meeting, etc.

The Grandstream Wave web portal can be accessed by using the UCM's server public address and port 8090. For example, <https://my.ucm.com:8090>

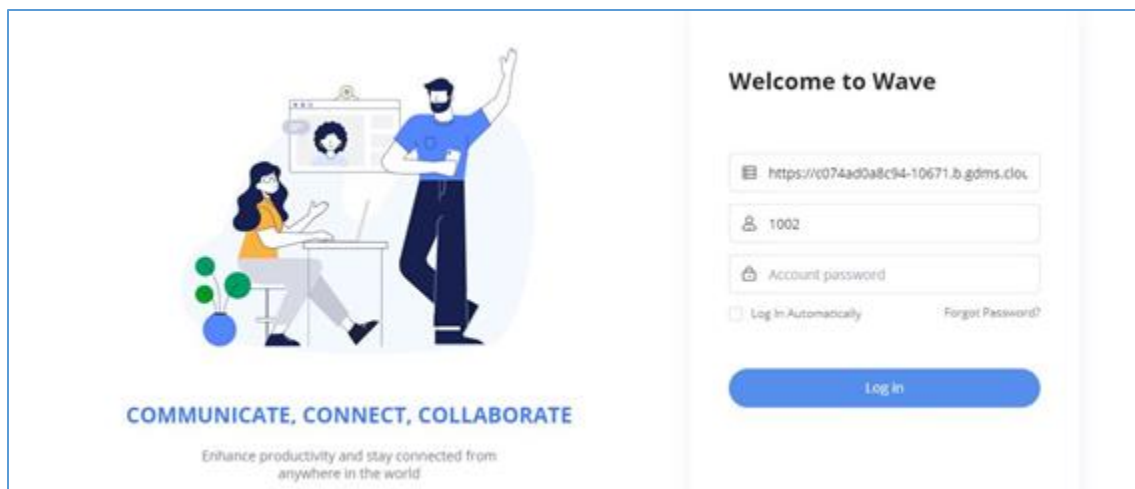


Figure 1: Grandstream Wave Web Login Page

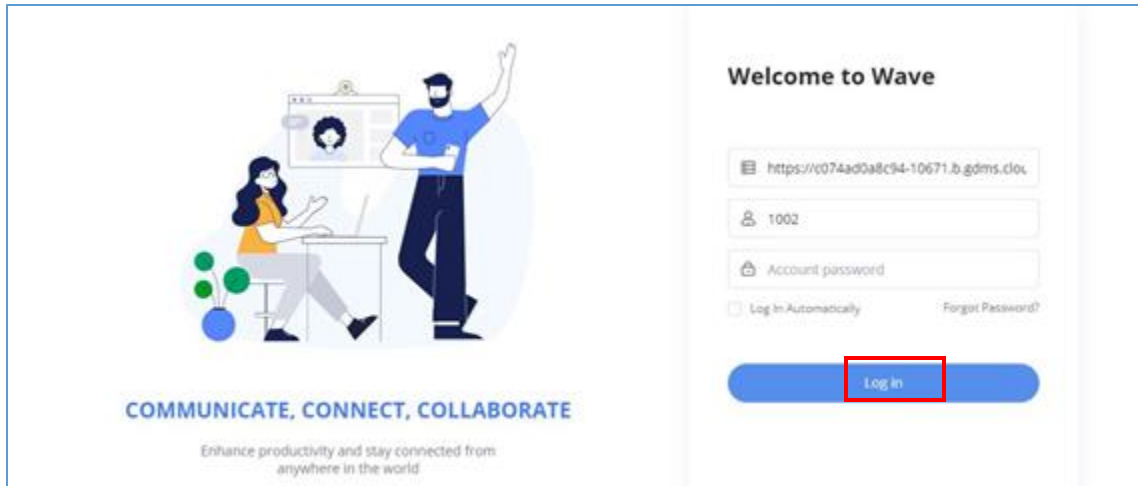
If the user can access UCM's admin web portal login page, he can click on the "Wave" link under the "Login" button to open the Grandstream Wave web portal.

### Notes:

1. If the UCM has set up the remote work suite service, the user can log in and use Wave Web client directly using the domain name issued by the GDMS platform in the service module.
2. The user must log in with the user password, and the SIP password is not supported for login. If the user does not know the user password, please contact the administrator, or reset the user password.

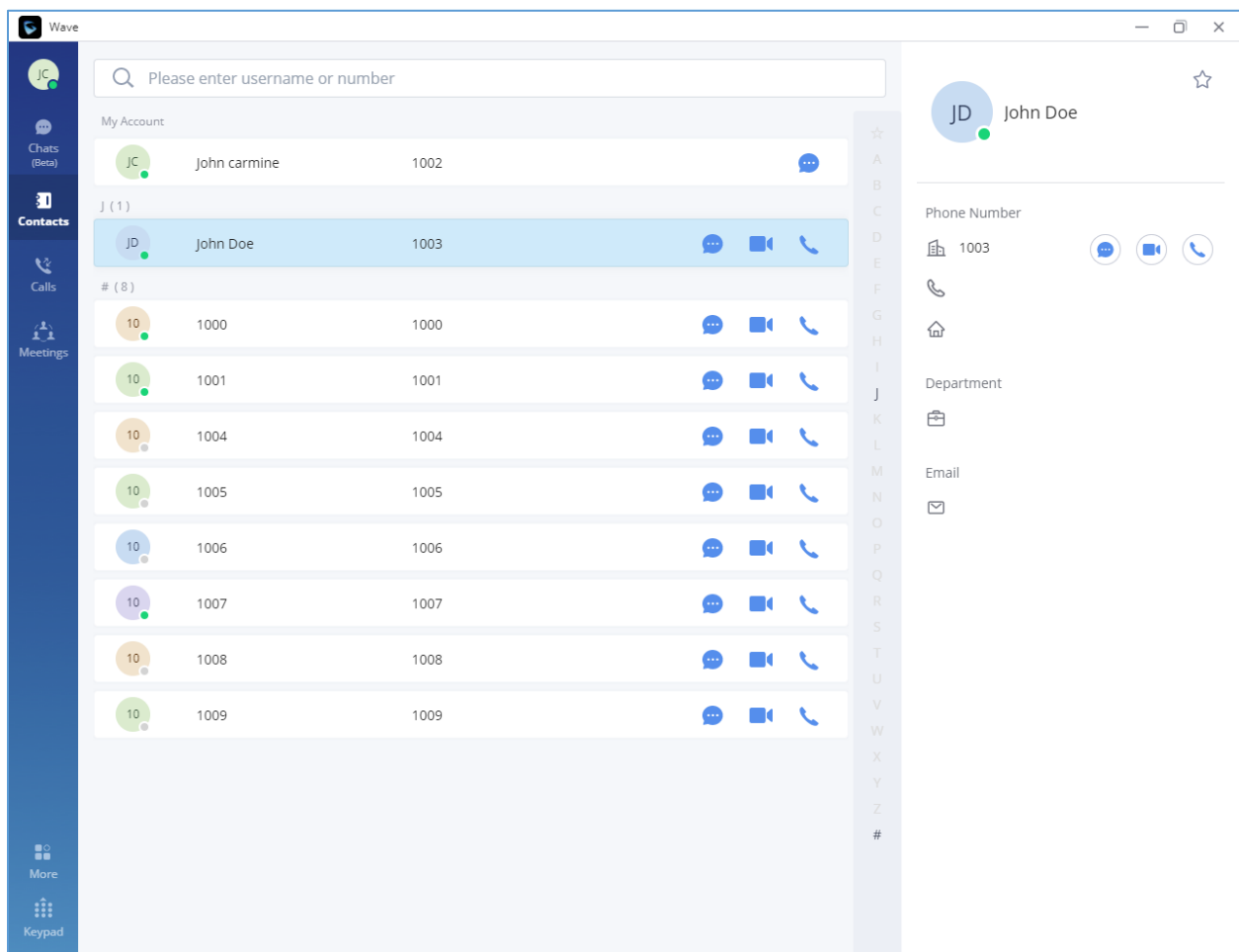






**Figure 2: Access Grandstream Wave Web Portal from UCM Admin Login Page**

Enter an extension number and its user portal password on the Grandstream Wave web login page. Once logged in successfully, the following page will appear:



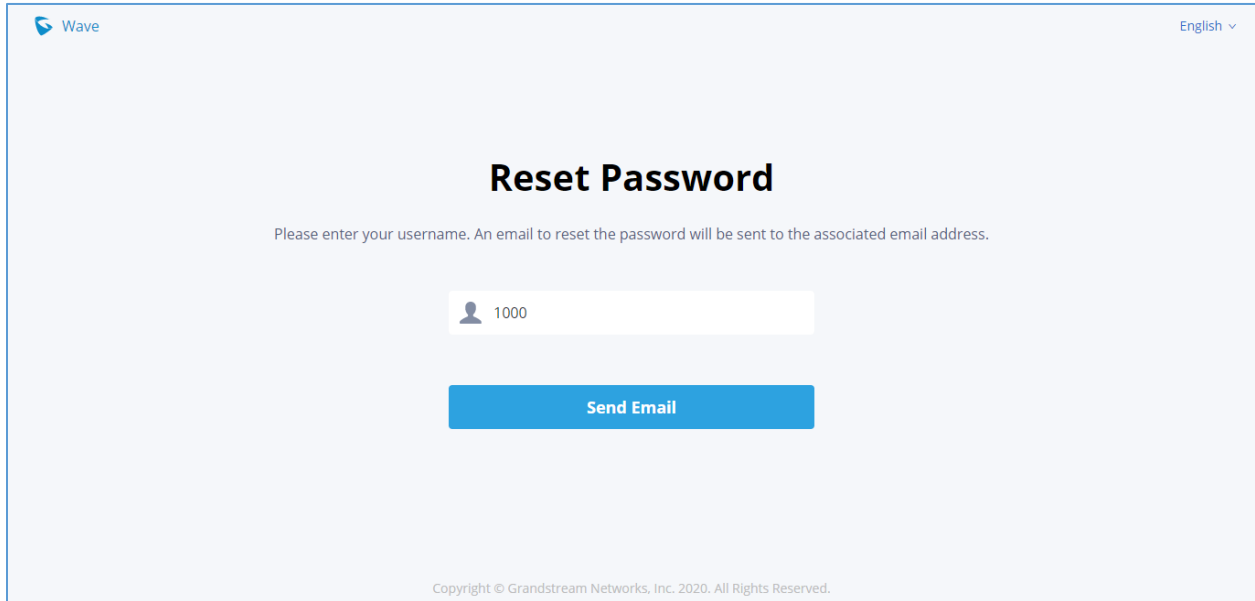
**Figure 3: Grandstream Wave Web Default Page after Login**



## Wave Password Recovery

Users can reset Wave login password by following the below steps:

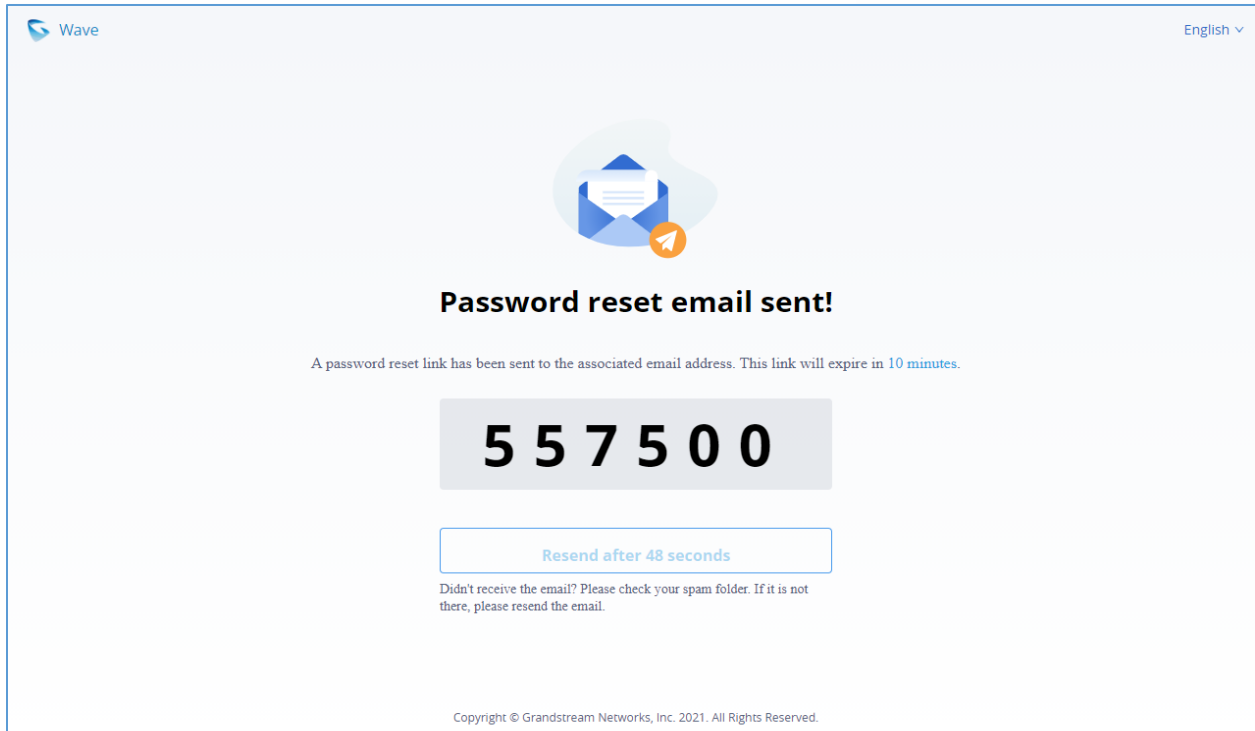
1. Click on Forgot Password and the below window will be displayed, then enter the username.



**Figure 4: Reset Password – Username**

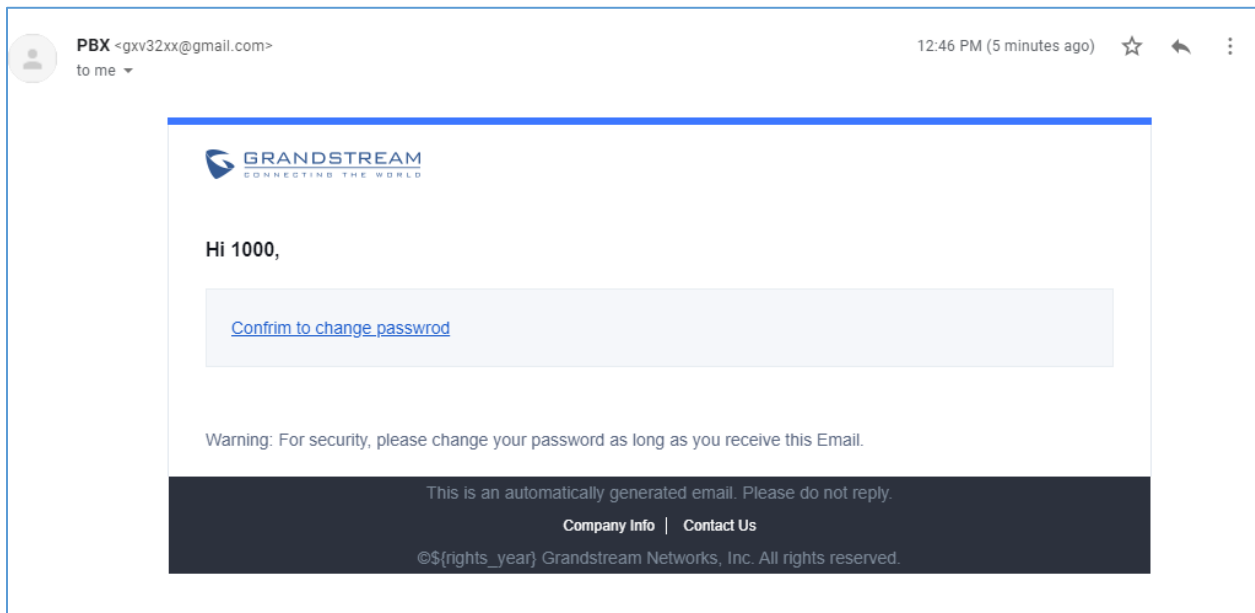
2. After clicking on Send Email a verification code will be given.





**Figure 5: Reset Password - Verification Password**

3. And an email will be sent to the email address configured under the extension.

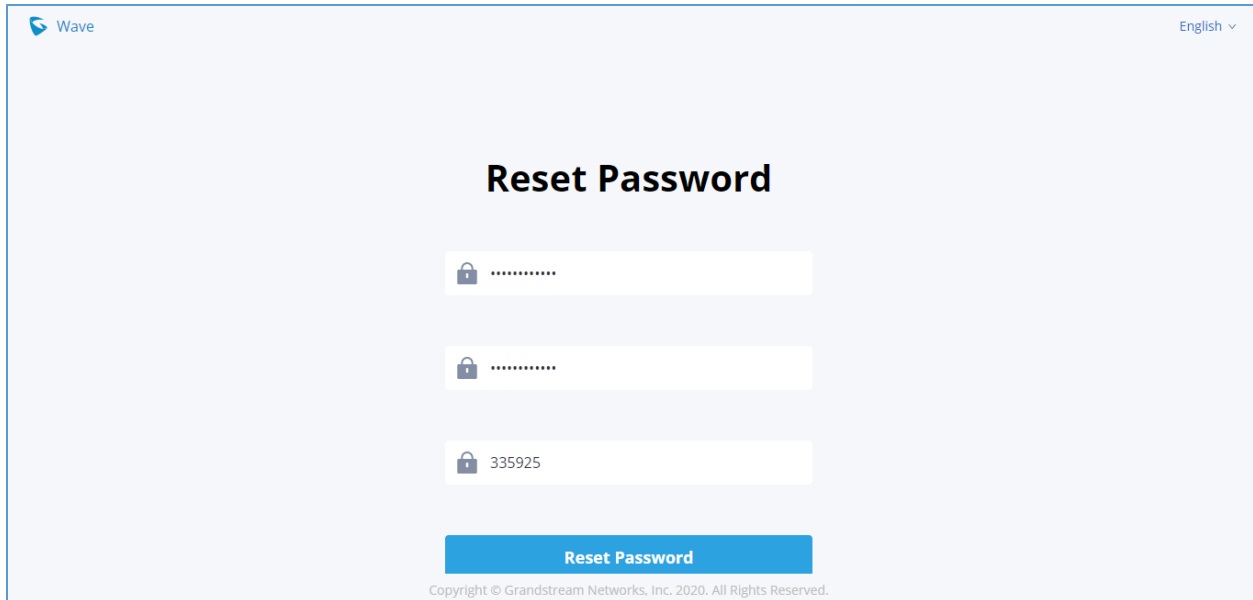


**Figure 6: Reset Password – Email**

4. On the received email, click on the link to confirm to change password and you will be redirected to the below page, where you will need to enter a new password, re-enter it, and the provided



verification code, as shown below:



**Figure 7: Reset Password**

5. And you will be jumped to the login page after the password is reset correctly.

**Note:** Users can reset the Wave login password, not the extension SIP password, which means when you reset the Grandstream Wave's password, the Endpoint phone's SIP account's password will not be reset.

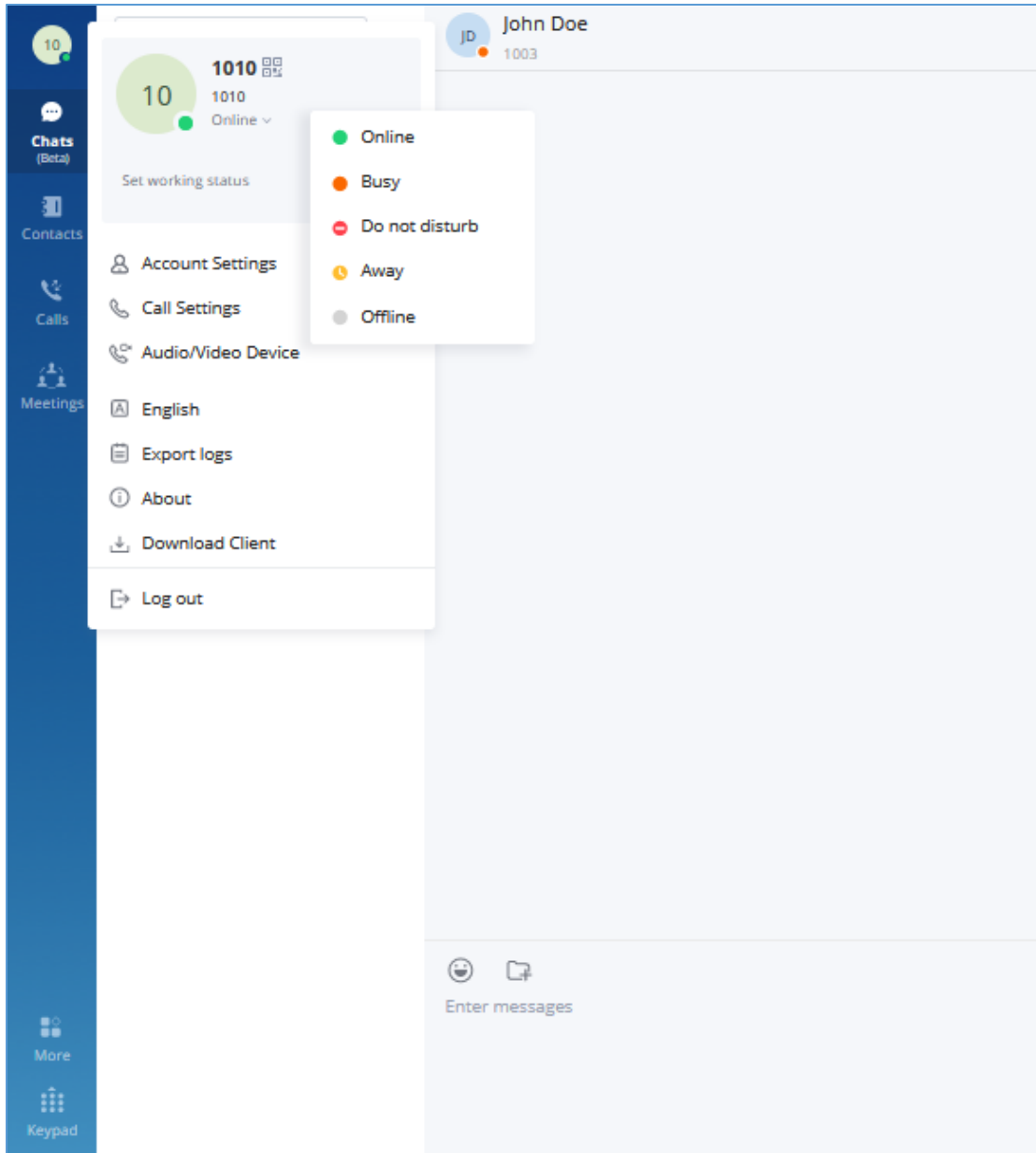
## Custom Status

Wave users can customize the status in the application. It is divided into account status and working status, and it is displayed in the contacts book and chat module.




- **Account Status:**

The user can click the user icon to enter the configuration interface, then click the status below the account at the top to customize the status of the account, as the screenshot shows below:





**Figure 8: Account Status**

-  **Online:** This is the default account status. The new calls and messages will prompt users.
-  **Busy:** The user is busy now, and the user can send/receive new calls and messages normally.
-  **Do not disturb:** The new incoming calls and messages will be prompted without any sounds, and there is no pushing notification. The new incoming calls will be ignored, and the new missed call history will be generated.



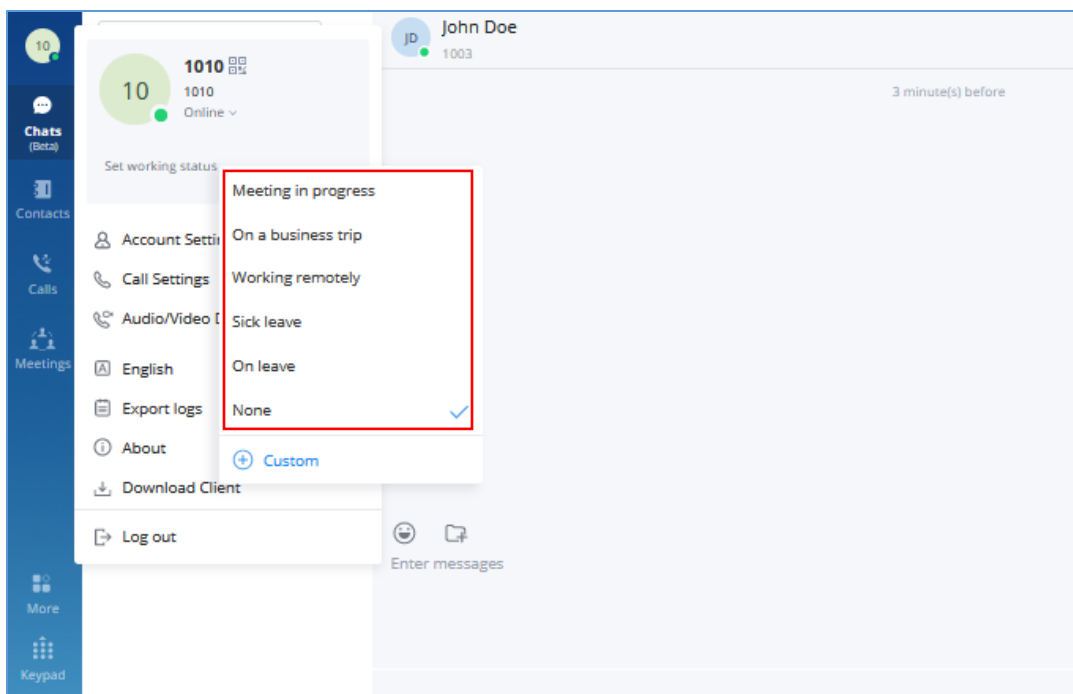
10 **Offline:** The account status will be displayed as offline, but the user still can send/receive calls and messages normally.

10 **Away:** The account status will be displayed as away, but the user still can send/receive calls and messages normally.

- **Working Status**

The user can click the status bar below the user icon and click “Set Working Status” to select the following working status: Meeting in progress, on a business trip, Working remotely, Sick leave, On leave, None, and Custom.

After setting the working status, it will be displayed in the contacts book and chat module.



**Figure 9: Working Status**

**Note:** The custom working status allows users to enter up to 64 characters and the emojis are not allowed.

## Custom Avatar

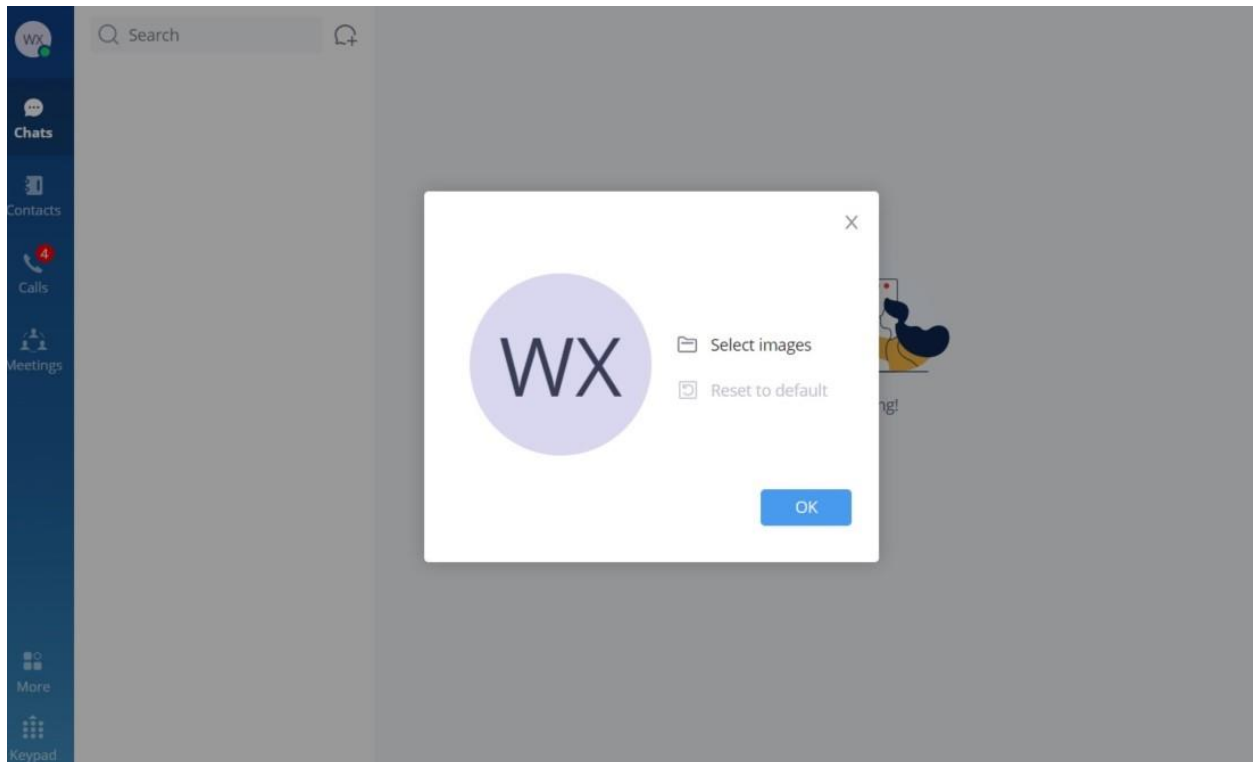
Users can customize the profile avatar and the custom avatar will be displayed in the contacts book, chat interface, and meeting interface.



**Step 1:** Click on the account icon on the left upper corner, and click “**Change profile picture**”, users can modify the avatar as the screenshot shows below.

**Step 2:** Click on “**Select images**” to open the local file selection window, users can select the images from local files.

**Step 3:** Select an image and click “**OK**” to upload the custom avatar to the application.



**Figure 10: Custom Avatar**

Users can click the “**Reset to default**” option to restore the avatar to the original avatar.


**Note:** Custom avatar uploading only supports PNG, JPG, and JPEG files.

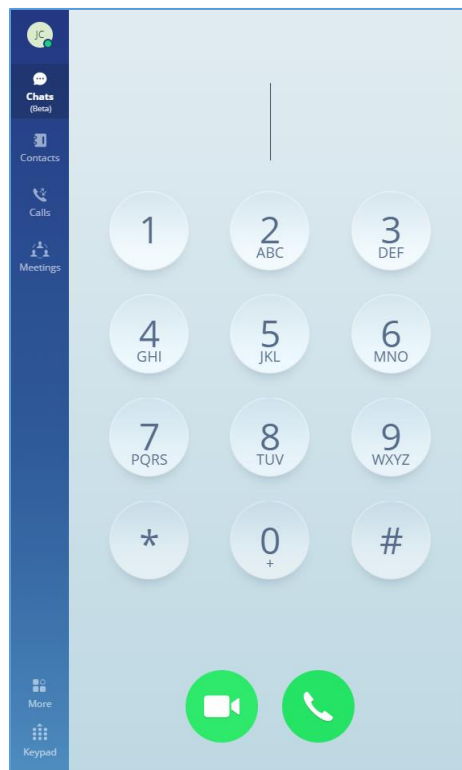


## MAKING CALLS



Users can use Grandstream Wave web for point-to-point audio and video calls.

### Initiating a Call from Keypad

1. After logging in to Grandstream Wave web, click on the Keypad icon  on the bottom left of the page to bring up the keypad.




**Figure 11: Initiating a Call from Keypad**

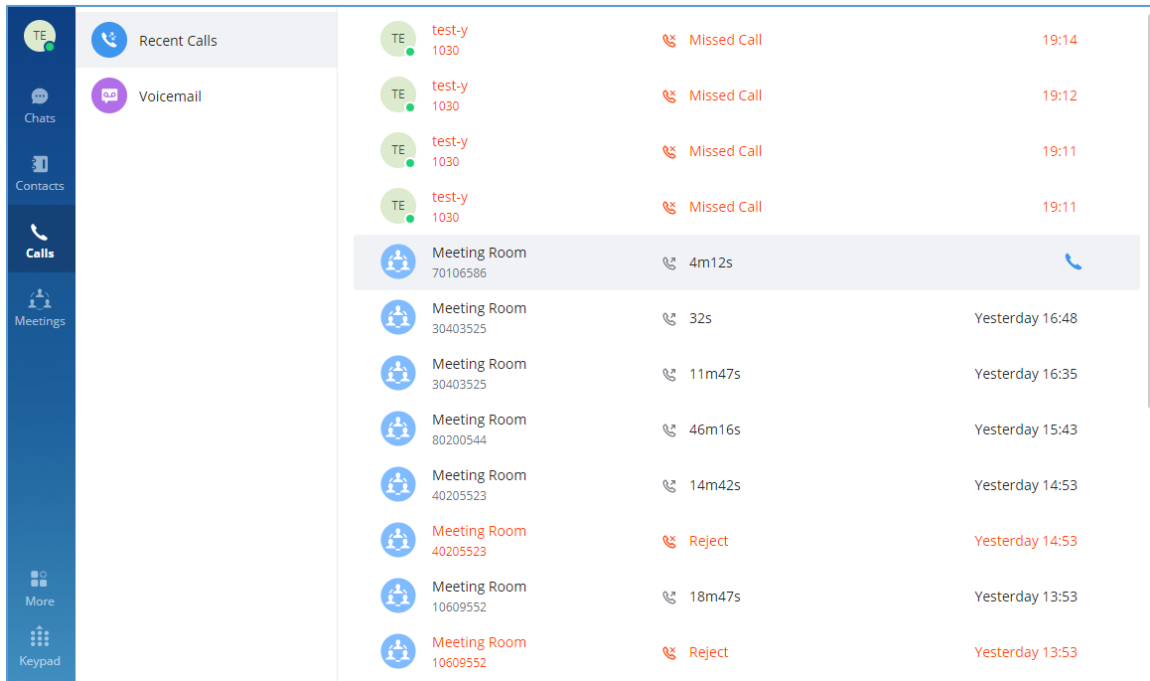
2. Enter the number to dial.
3. Click on  for a video call or click on  for an audio call.

**Note:** All calls are routed via UCM. Users can dial internal extensions, PSTN numbers, and mobile phone numbers as needed.






## Call History

After logging in to Grandstream Wave web, click on the “Calls” icon  on the left panel to view recent call history.



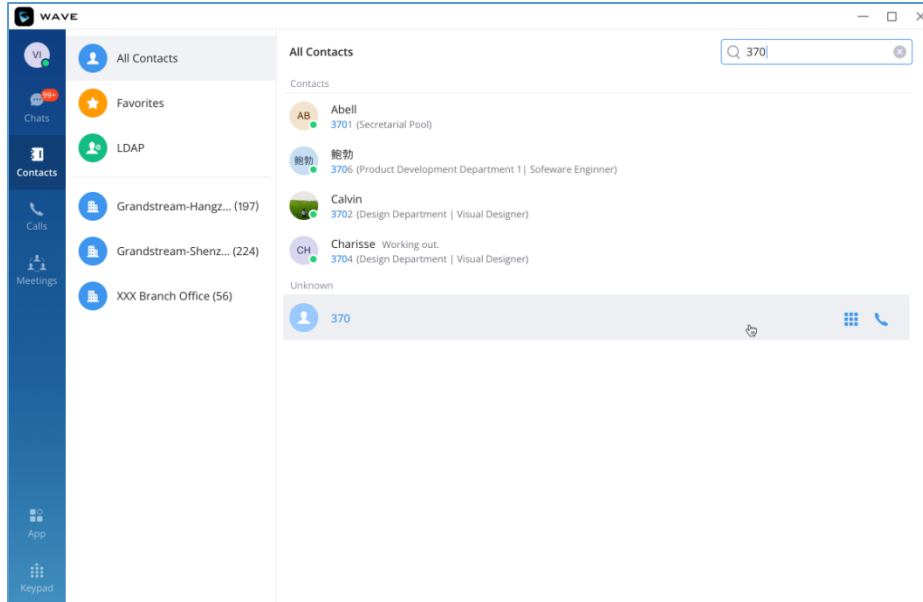
**Figure 12: Call History**

1. The user can enter the number or username to search in call history.
2. Scroll up and down to view more call history if existed.
3. For the call history entry, click on  to make a video call and click on  to make an audio call or  for a chat.
4. When a call history entry is selected, the details of this entry are displayed on the right side.



## Contacts

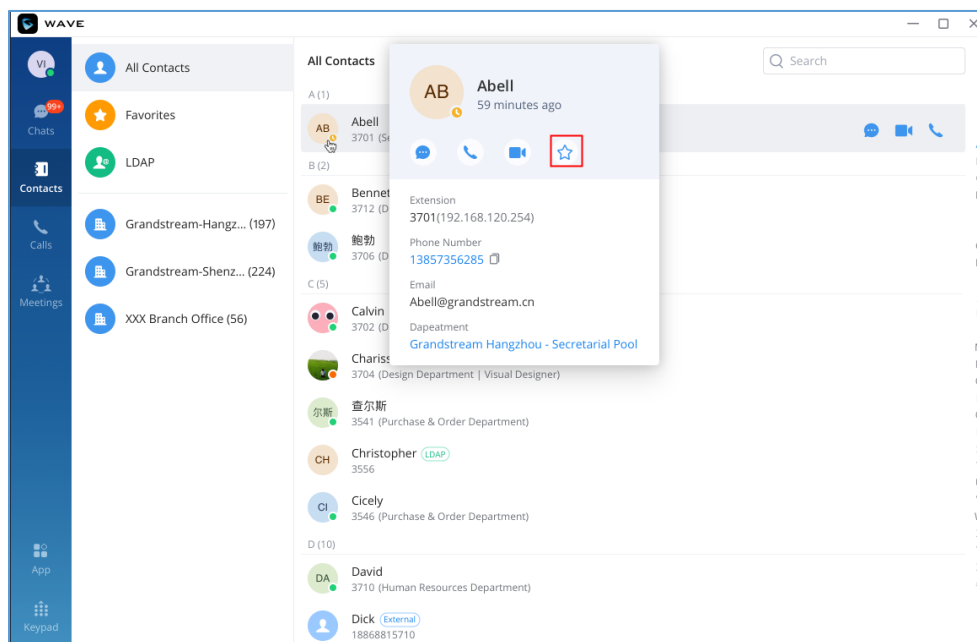
Users can search for specific contact or a specific number to dial under Contact Tab and Recent Calls Tab.





**Figure 13: Contact Search**

1. In the search bar, enter the number or username to search.
2. Click on the search result. The details of this contact will show on the right.
3. For the search result, click on  to make a video call and click on  to make an audio call.
4. Also, by clicking on the contact, you can add it to your favorite contact tab as shown below.



**Figure 14: Favorite Contacts**

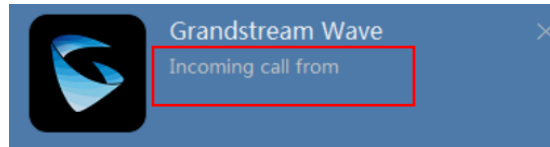


**Note:** The contacts displayed in the Grandstream Wave web portal contain UCM extensions (based on contact privilege settings), meeting room extensions, and LDAP contacts (based on the UCM's LDAP phonebook settings). (Refer to the UCM630x/A User Manual for more details)








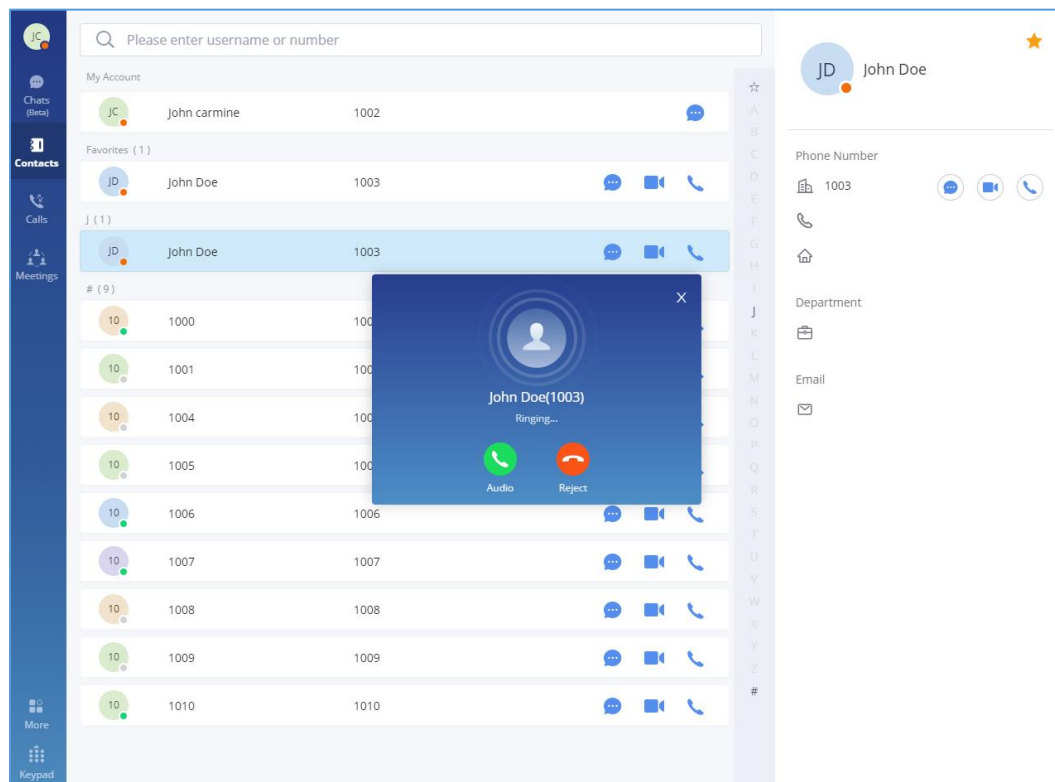
## ANSWERING CALLS

If the user has logged in to Grandstream Wave web, when there is an incoming call, the web browser will prompt an incoming call notification. Clicking on the notification will bring up the Grandstream Wave web page.



**Figure 15: Incoming Call Notification on the Browser**

- If it is an audio call, the user can select  to answer the call, or select  to hang up.
- If it is a video call, the user can select  to answer with video, select  to answer with audio only, or select  to hang up.

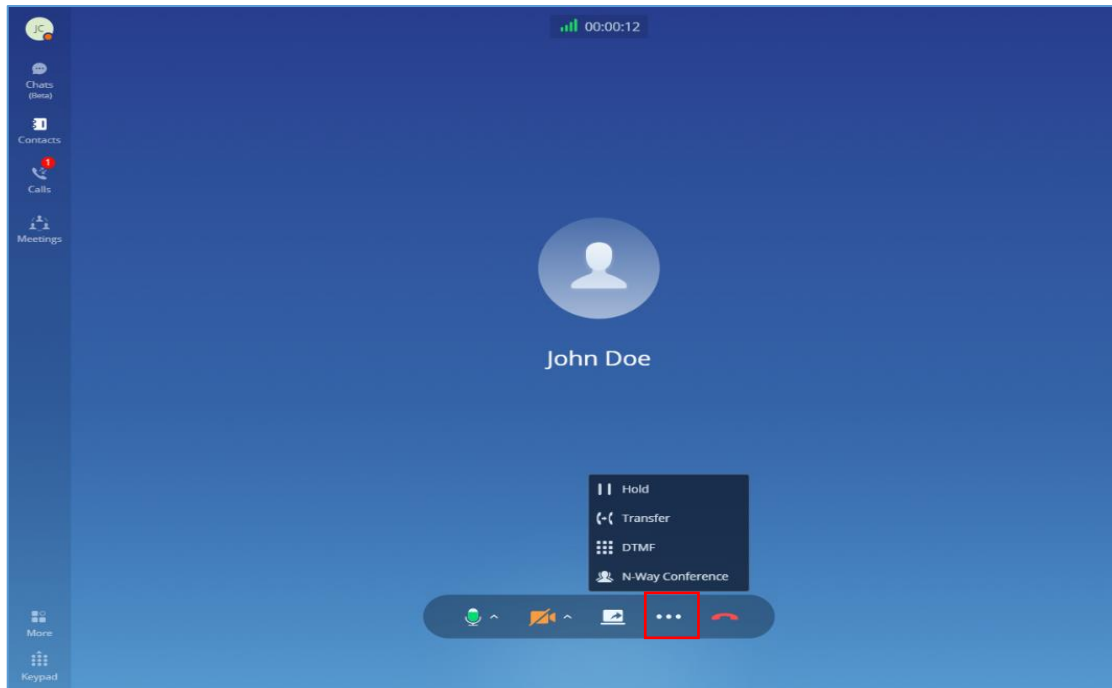


**Figure 16: Incoming Call Prompt on Grandstream Wave Web Page**

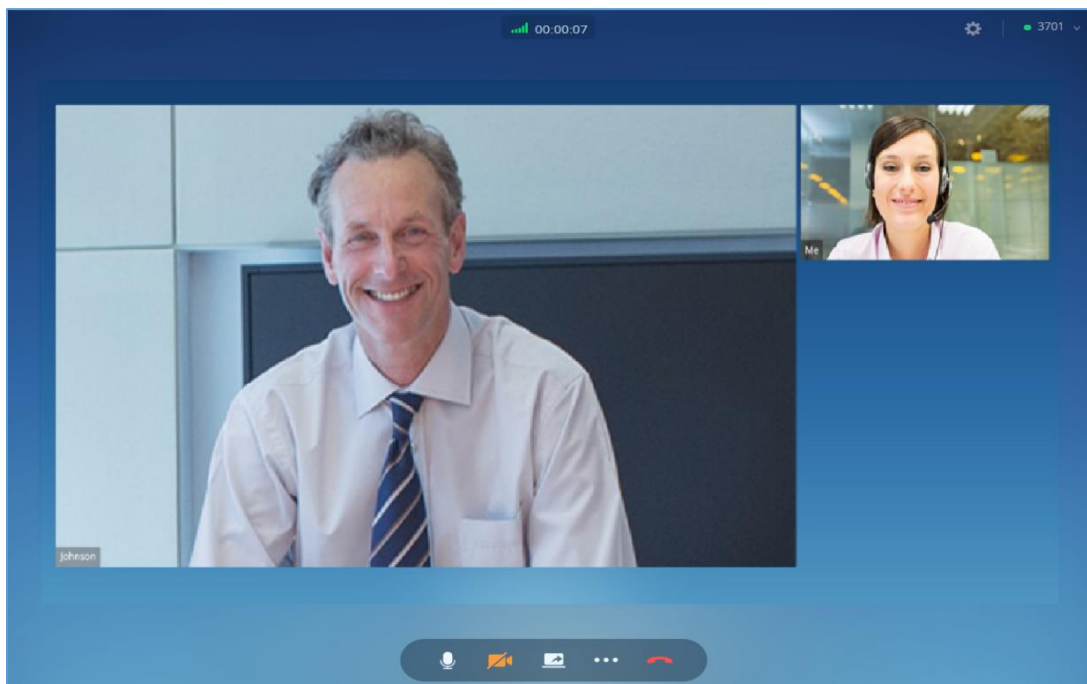


## DURING A CALL

Once the call is established, users can mute/unmute themselves, enable and disable their video feed, screen share (video calls only), hold/unhold the call, and transfer the current call.

















**Figure 17: Audio Call Screen**






**Figure 18: Video Call Screen**

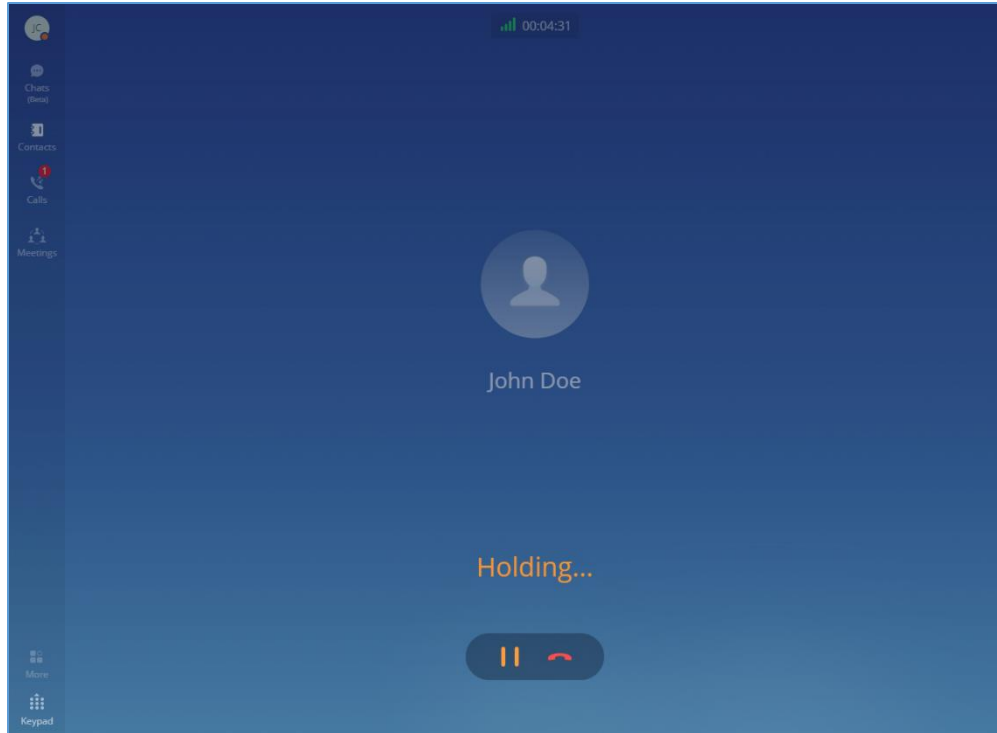


- : View current network connection status including audio and video packet loss.
- : End call.
- : Mute/unmute. Users can click the “**More**” button to enter the alternative ringing speaker settings interface.
- : Video on/off. Users can click the “**More**” button to enter the virtual background settings interface.
- : Share screen.
- : Click to open more functions such as transfer and hold.
- : After clicking on  for more functions, click on this icon to hold the call.
- : After clicking on  for more functions, click on this icon to transfer the call.
- : After clicking on  for more functions, click on this icon to enter DTMF.
- : After clicking on  for more functions, click the button to transfer both parties' calls to the conference room for the call, so that more people can be added to the conference.

## Hold/unhold



1. During a call, click on the  icon and select  to put the current call on hold.
2. To resume the call, click on .

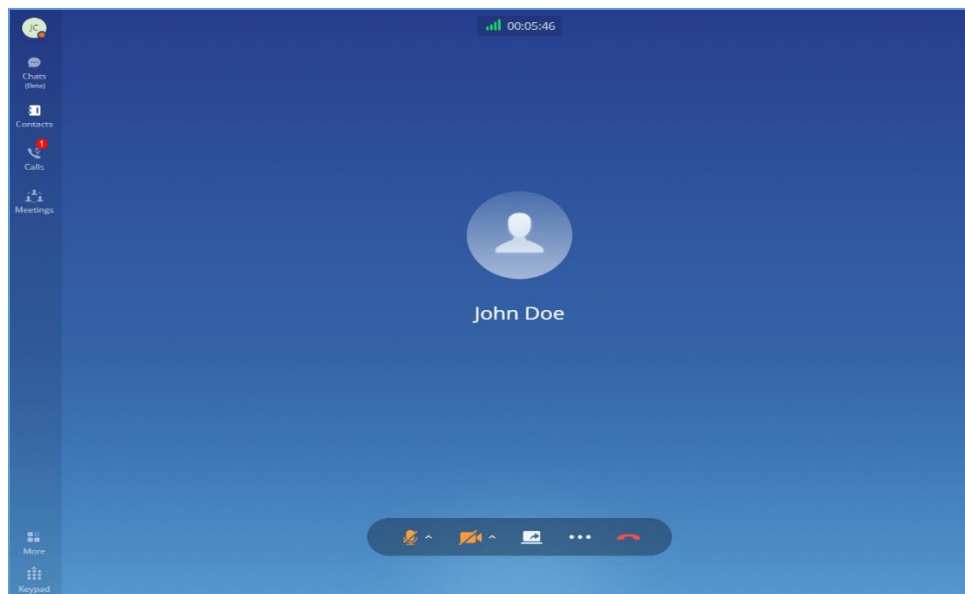




**Figure 19: Call On Hold**

## Mute/unmute


1. During a call, click on  to mute the call. The user will not be heard by other parties anymore.
2. To unmute the call, click on . The user can now be heard by the other parties.



**Figure 20: Mute during a Call**



## DTMF

1. During the call, press the more button to open the menu page, and click the DTMF  button and a soft keyboard will be opened, as shown in the figure below.

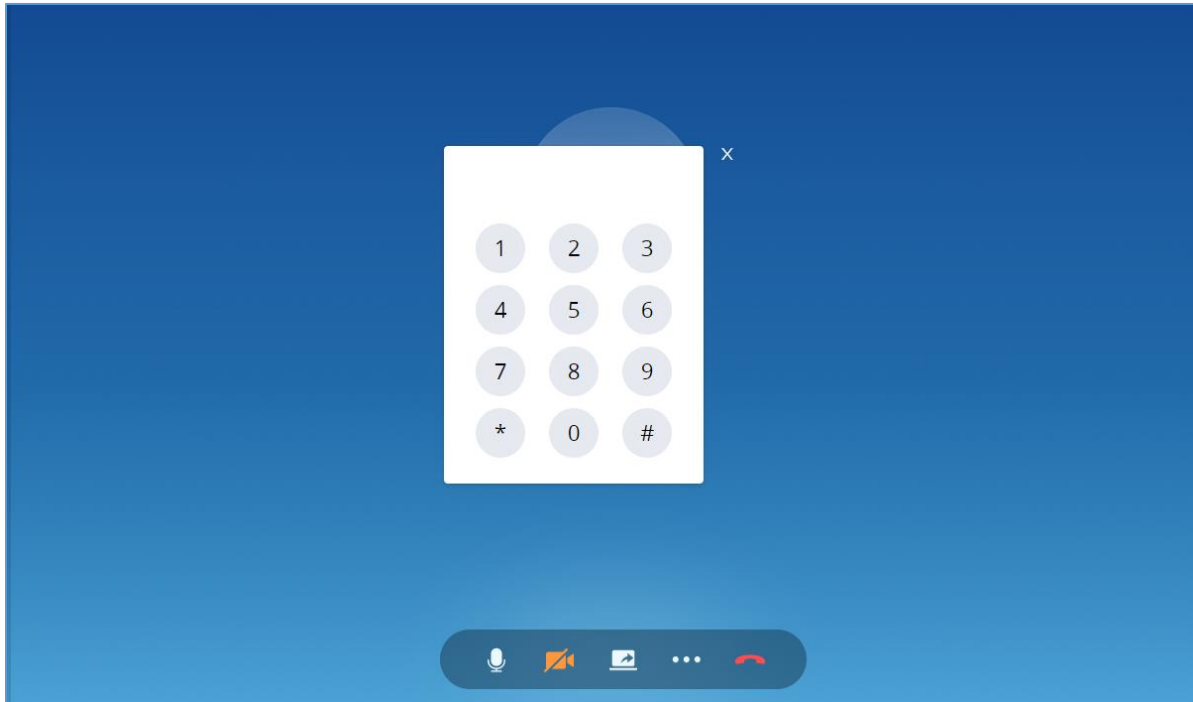



Figure 21: Open the DTMF Keyboard Interface during a Call

2. Click on the numbers that need to be entered.

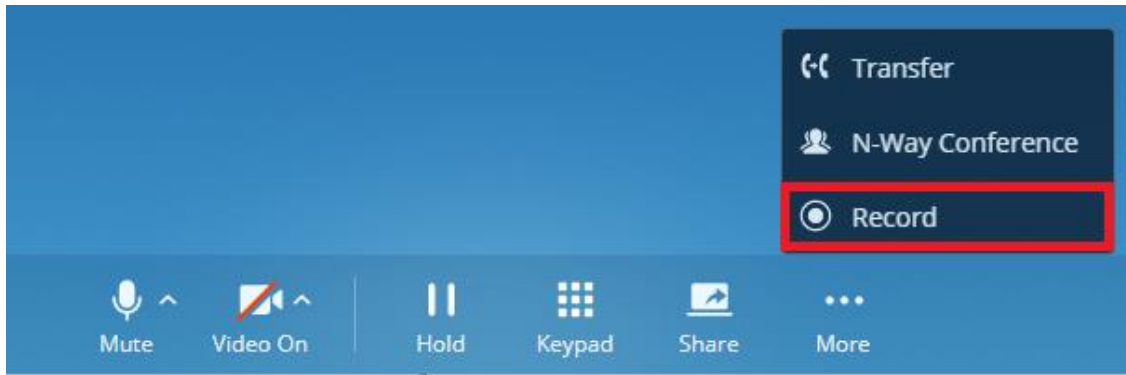
## Record an Ongoing Point-to-Point Call

Users can start the audio recording function during the point to point call. Users can click the More button


-> Recording  button to record the current call. Please see the screenshot below:

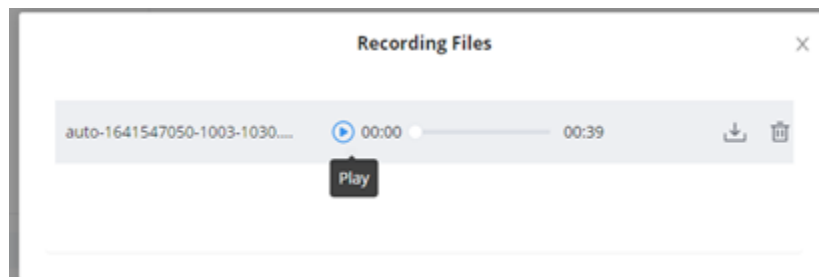







**Figure 22: Record a Call**

When the call is ended, users can click  button on the call history interface following the specific call log to listen to the call recording, and download/delete the recording files. Please see the screenshot below:

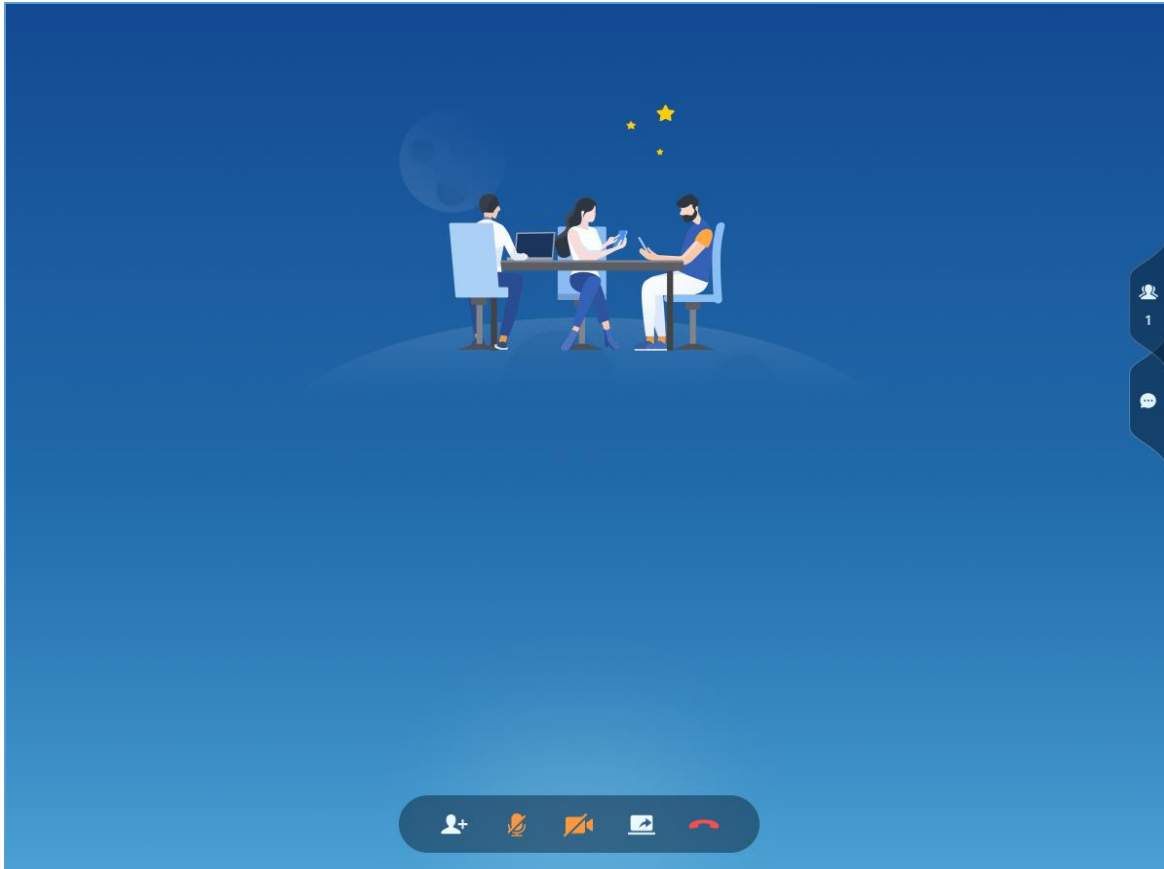


**Figure 23: Call Recordings**

## Transfer to Meeting Room

1. During the call, the user can click the “...” button to open the menu and click the meeting room button  to transfer the current call to the random video meeting room.
2. When the call has been transferred to the video meeting room, the operator will become the meeting host.





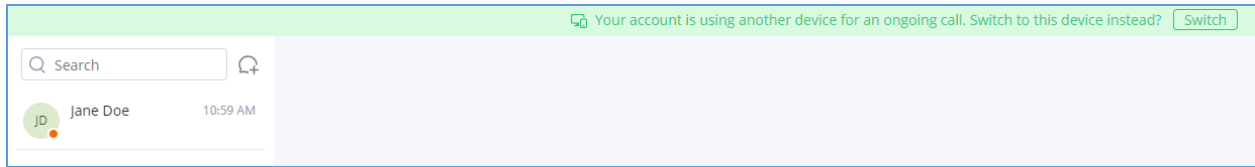
**Figure 24: Transfer to Video Meeting Room**

## Call Flip Function

Let's say you initiated a call on your GS Wave softphone app, but when you arrived to your office, you wanted to continue the call on your Grandstream desk phone or on Wave Web client. Call flip function allows to do that seamlessly. Without any interruption, you can switch between calls from device to another without having to hang up the call. Also, the callee won't notice that you have switched devices. In order to be able to use the call flip function, make sure that both devices have the same account configured on them.

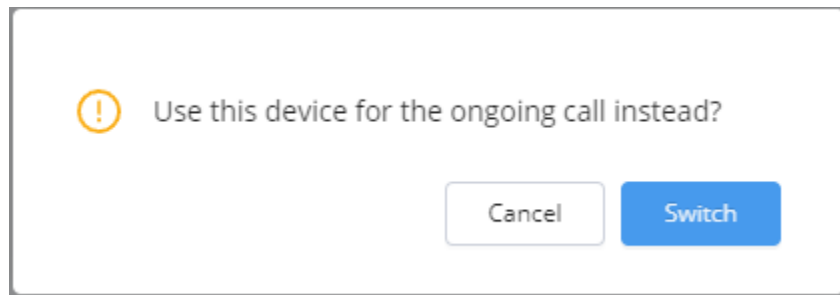
On the device you want to switch to, a green bar will appear notifying you that there is already a call ongoing on a different device. In our example, if you open Wave Web App you'll see the green bar on top side of the screen and if you wish to continue that call on the Wave Web app, click on [Switch](#)






**Figure 25: A Call is Already Ongoing on a Different Device**

After you click on “Switch” this prompt will appear:





**Figure 26: Confirm Your Choice To Switch The Call Device**

Confirm your choice by clicking on 

The call will be switched to the Wave Web App without any interruption.



## MULTIPLE LINES

It supports two lines at the same time. The user can quickly switch lines in the lower-left corner. The user can click the button  to answer the call and click the button  to hang up the call.

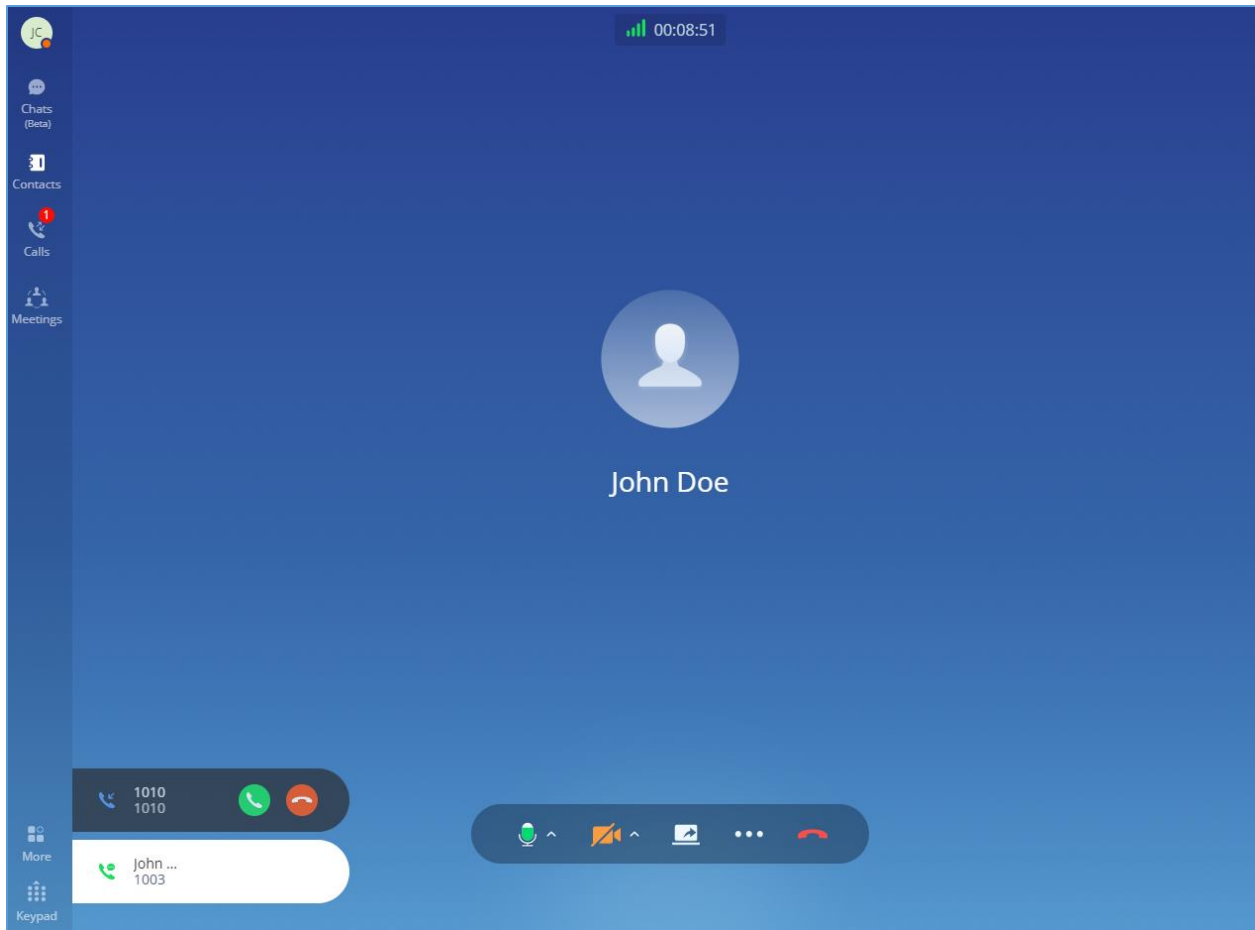


Figure 27: Multiple Lines



## MISSED CALLS

If the user has logged in to Grandstream Wave web, when there is missed call, the browser will prompt missed call notification. The user can also check missed calls in the “Recent Calls” tab.

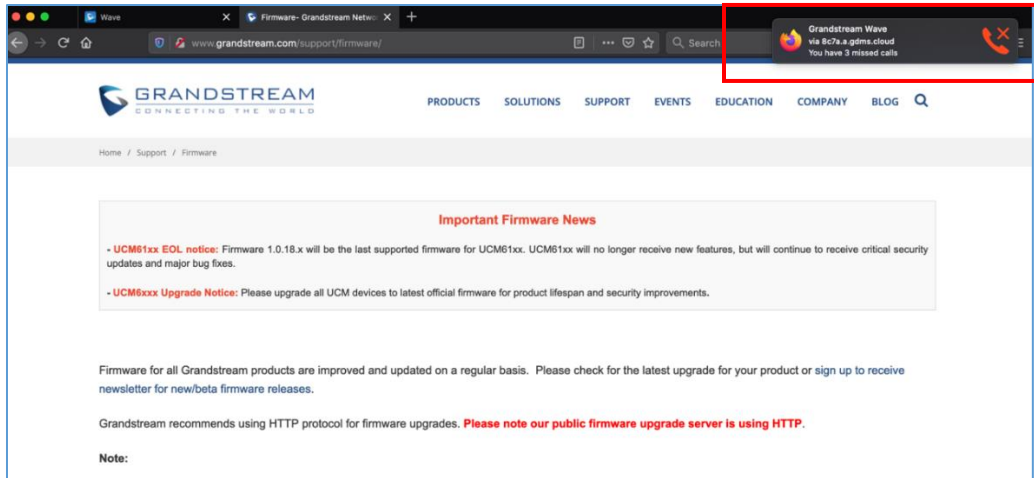


Figure 28: Missed Call Notification on Browser

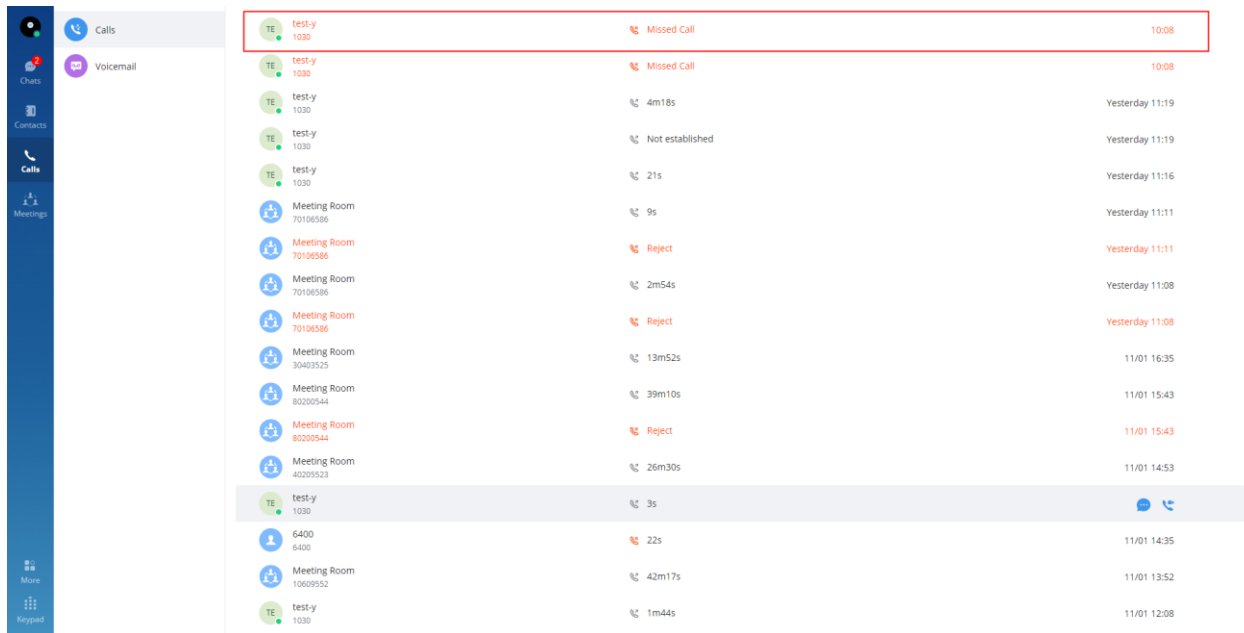


Figure 29: Recent Calls



**Note:** If the user is not logged in on Grandstream Wave web, the user will not receive notification on the browser.



## CALL TRANSFER

Grandstream Wave web users can transfer the current call to another party via blind transfer or attended transfer.

### Blind Transfer

1. User A is using Grandstream Wave web. Establish a call between User A and User B.
2. On User A Grandstream Wave web call screen, click on the  icon and select transfer .
3. Enter User C's number as the number to transfer the call to. The number will be listed in the search result.
4. Click on "Blind" to perform a blind transfer.
5. User C rings. User A hangs up automatically. When User C answers, the call between User B and User C will be established.

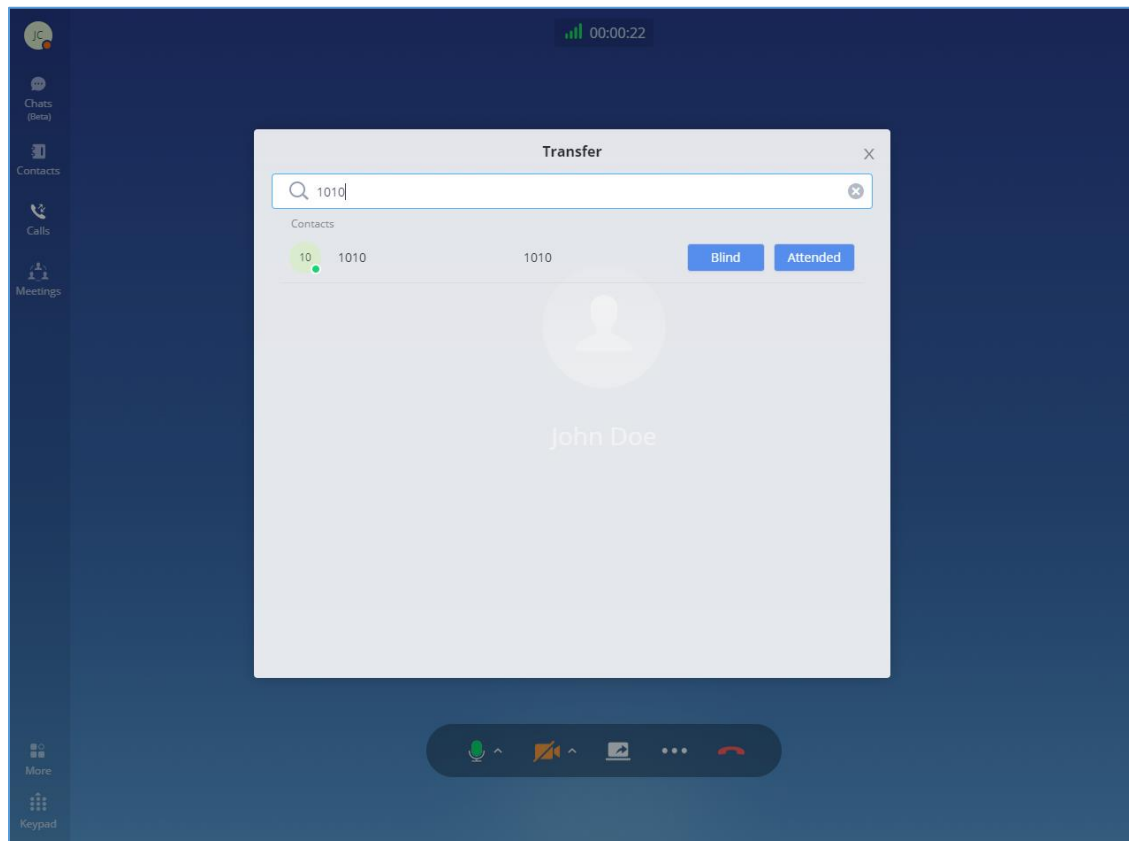




Figure 30: Blind Transfer



## Attended Transfer

1. User A is using Grandstream Wave web. Establish a call between User A and User B.
2. On User A Grandstream Wave web call screen, click on the  icon and select transfer .
3. Enter User C's number as the number to transfer the call to. The number will be listed in the search result.
4. Click on "Attended" to perform attended transfer.
5. User C rings.
6. If User C answers, User A and User C will establish the call. User A can end the call to complete the transfer. If User C does not answer the call, User A can end the call now to complete the transfer. When User C answers, the call between User B and User C will be established.

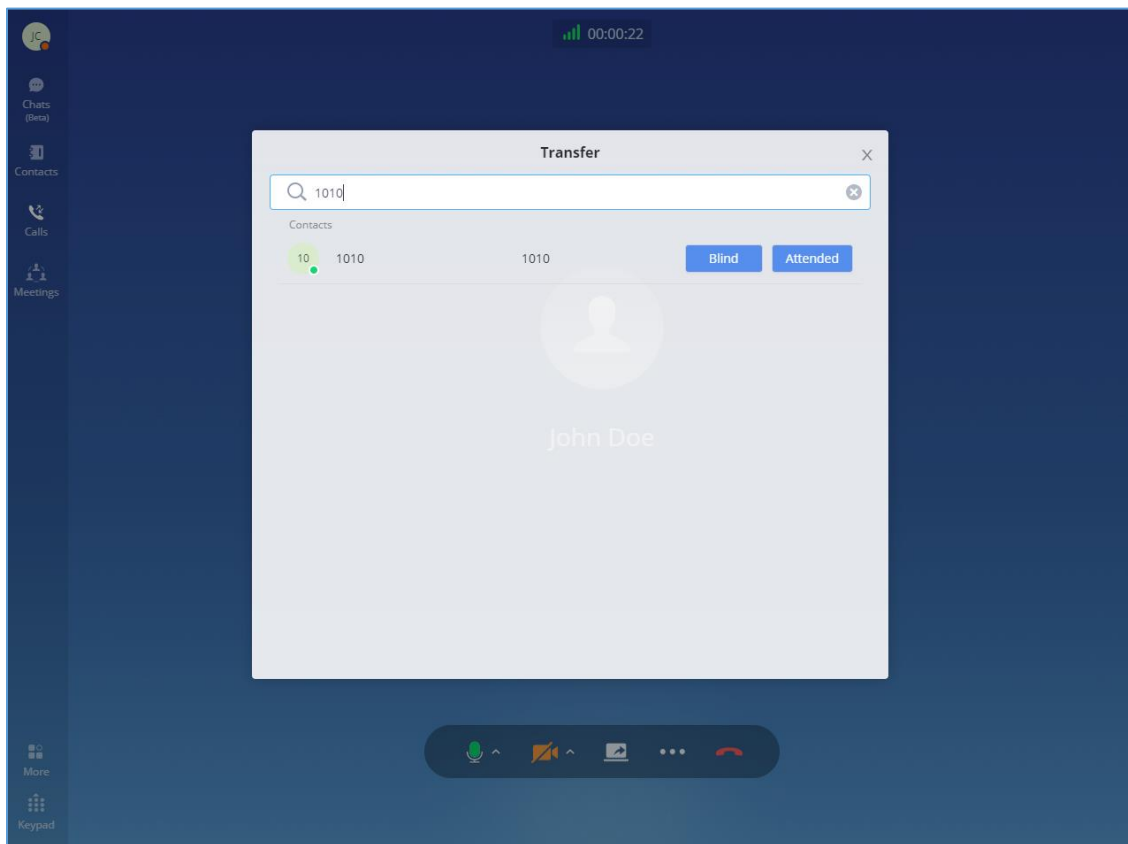



Figure 31: Attended Transfer

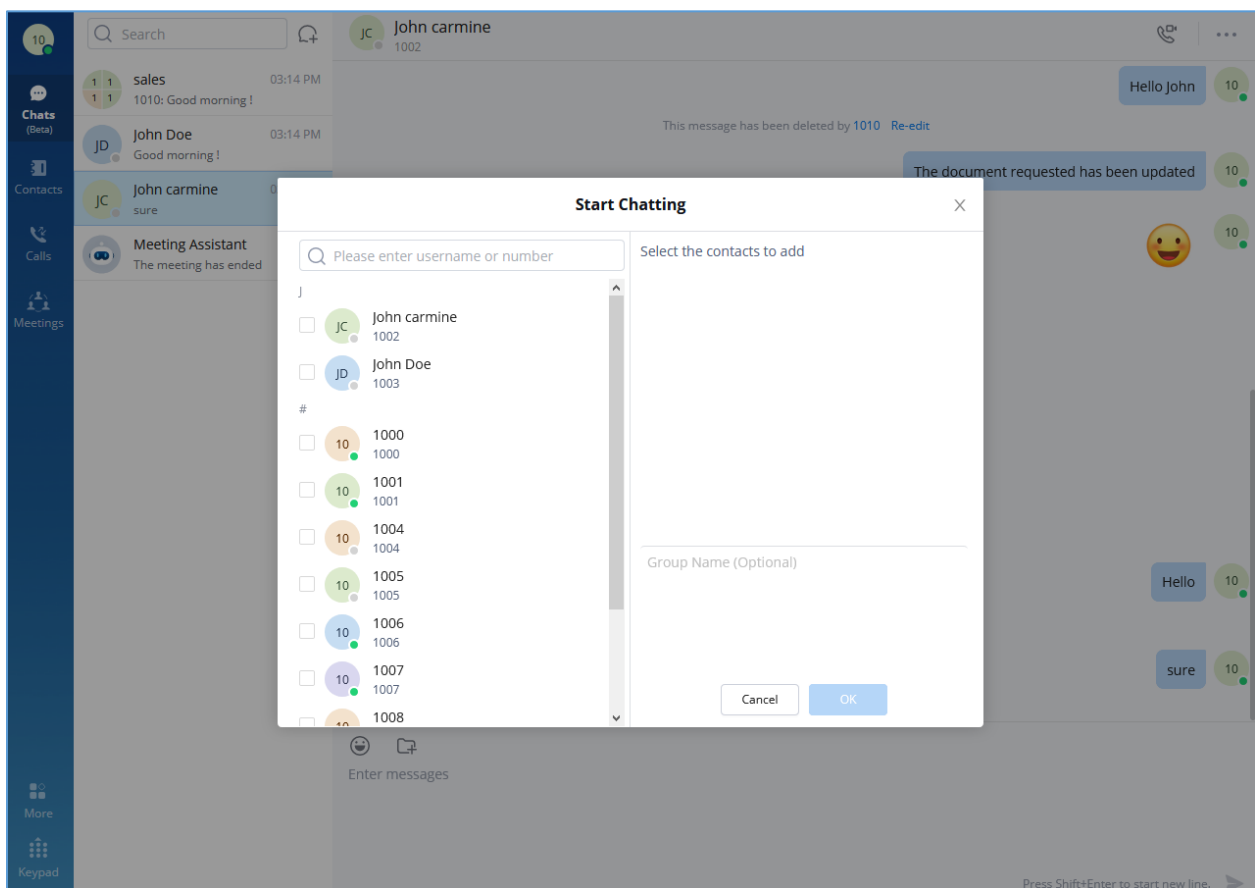


# CHAT


Wave Web allows users to conduct a peer-to-peer chat or a group chat. After logging in to Grandstream Wave web, click on "Chat" on the left panel to open the chat page.


## Start a Single Chat

**Method 1:** After clicking on the "Chat", the user needs to click on  Button, then select the other party he/she wants to chat with and click OK to enter the single chat interface.




**Figure 32: Adding Chat Interface**

**Method 2:** The user can click on the "Contact" tab, find the contact he/she wants to chat with, and click  button, the user will be redirected to the chat section.


**Method 3:** The user can click on the "Calls" tab, find the contact he/she wants to chat with, and click  button to initiate the chat.







**Method 4:** The user can click on the "Keypad" tab, find the contact he/she wants to chat with among the calls log, and click  button to initiate the chat.

## Start a Group Chat

**Method 1:** After clicking on the "Chat", the user needs to click on  Button, then select multiple contacts he/she wants to chat with, enter the group name, and click OK to enter the group chat interface.

**Method 2:** In the single chat window, the user needs to click on , then on  to invite more contacts to form a group chat.

**Note:** Up to 500 users can be selected when creating a group chat.

## Send Messages

In the chat interface, sending text, emoticons, files/pictures are supported.

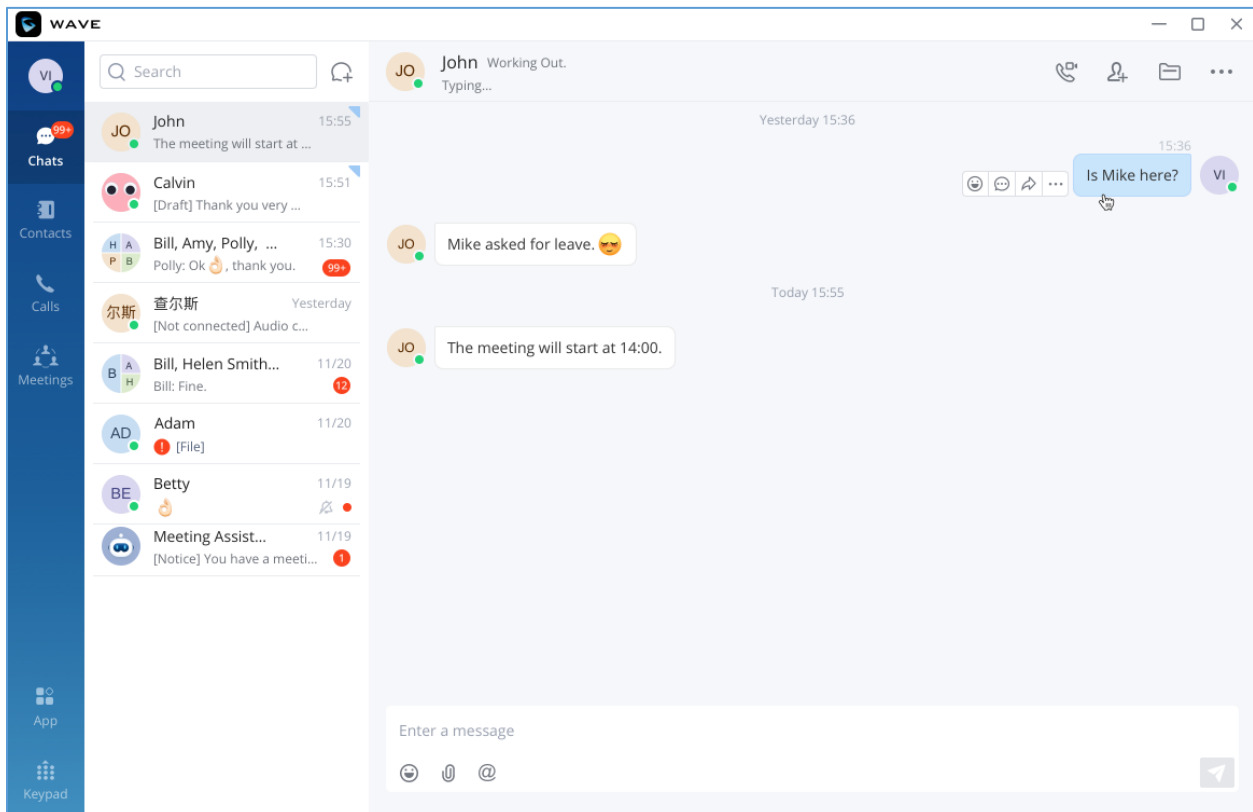







Figure 33: Chat Interface



## Notes:

- Text: Support sending any characters within 5000 characters.
- For a new line, press Shift + Enter to wrap.
- For emoticon, click on , it supports selecting one or more emoticons to send.
- For file/picture, click on , or drag a file to this window, you can select a file/picture to send from the local computer, and the file size is limited to 50M.
- For call, if it is a single chat interface, click on  to call the other party, select the  Audio call button to call the other party in audio. If it is a group chat page, click on the same button to initiate a group conference call, all group members will be called by default, and group chat messages will be brought into the chat box in the conference call.
- For a video call, only the single chat interface can initiate a video call; click on , select  Video call button to initiate a video call to the other party.
- @Everyone/someone: Only supported in group chats. Enter @ in the input box to send messages from @all or someone, and the other party will remind you of @Message.
- **Send Excel Content:** Copy the contents in the Excel file and paste the contents to the chat window. The user can select to paste the contents in a text (Paste text) or image (Paste image), and then send out the contents.

## Message Failed to Send

When a message fails to send, a red exclamation mark will appear right next to it as shown in the screenshot down below

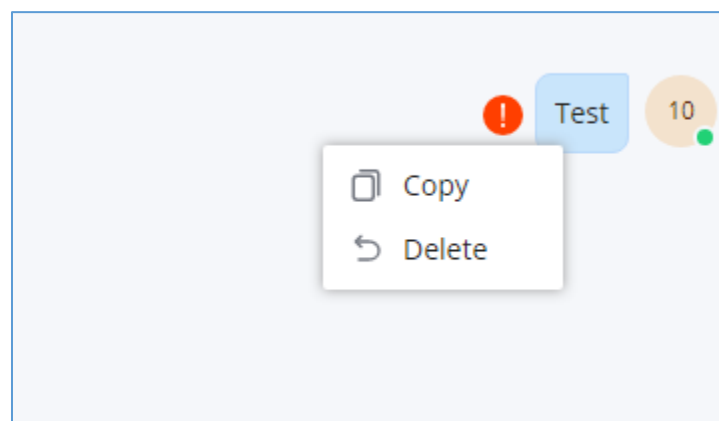



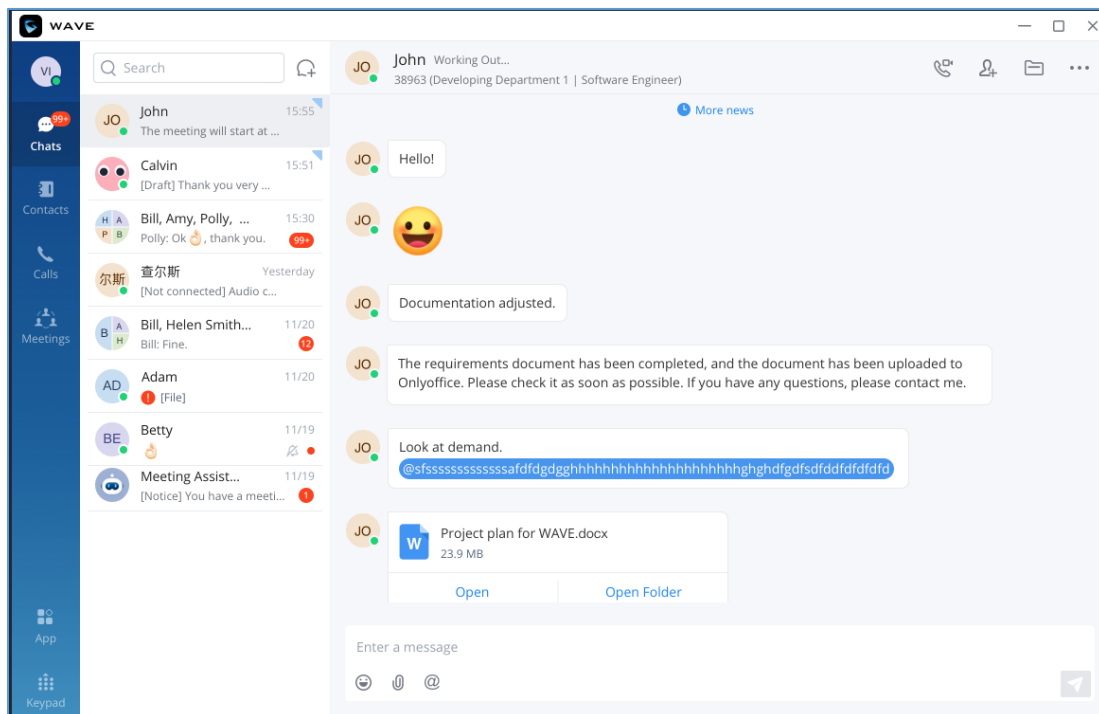
Figure 34: Failed Message

You can click on the exclamation mark to try to send it. Or, you can delete it by right-clicking on it and choose “Delete”.

## Files List

All the files that have been exchanged in a point-to-point chat or a group chat can be viewed in one list.

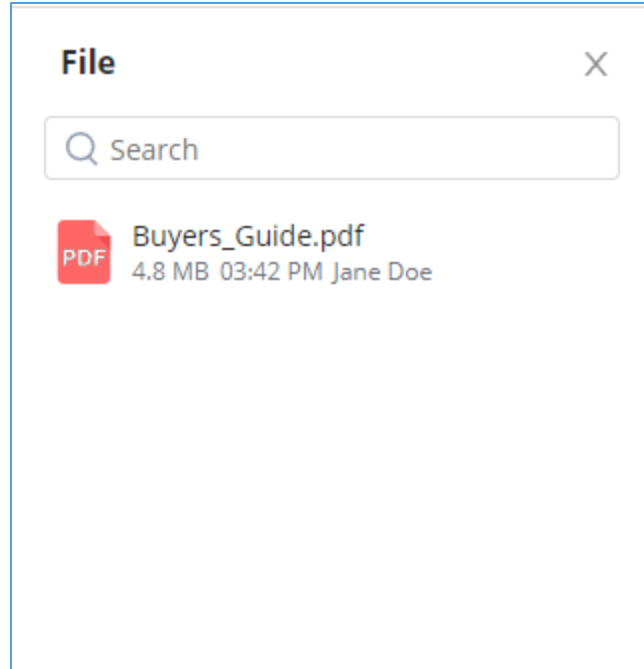
To access this list, the user needs to click on the folder icon  in the top right-hand corner of the screen of the chat, then the list will appear as shown in the image below:



**Figure 35: Chat Interface - File**

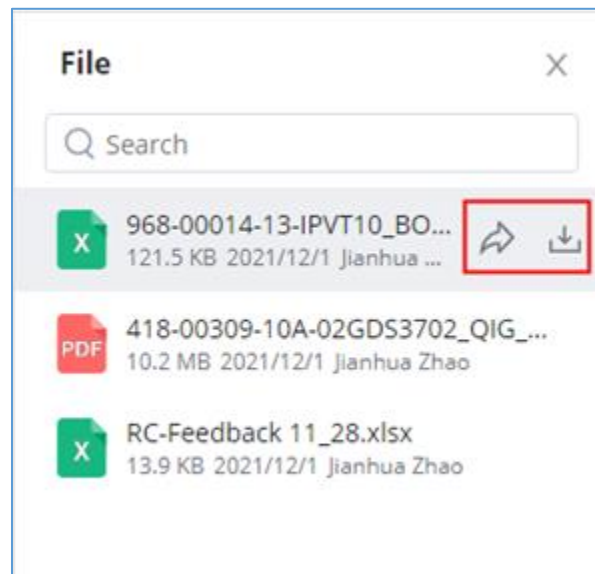
The files list will be displayed, and “Search” bar is available to quickly find the needed file.





**Figure 36: Files List**

Users can forward/download or open the files as shown in the screenshot below:



**Figure 37: Download/Forward a File**



## Copy Message

In the chat interface, select a message, with right-click select "Copy" to copy the content of the message. Currently, files and pictures do not support copying.

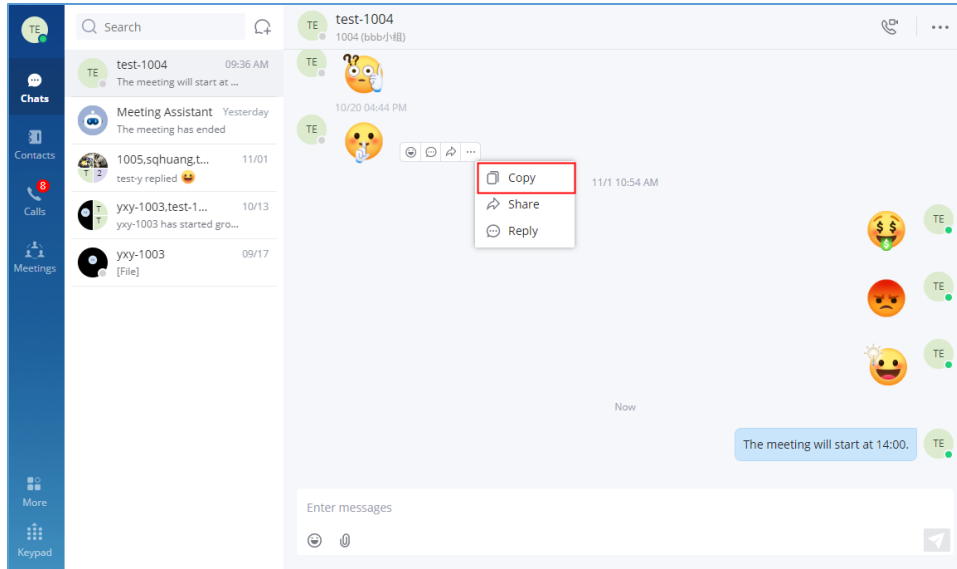


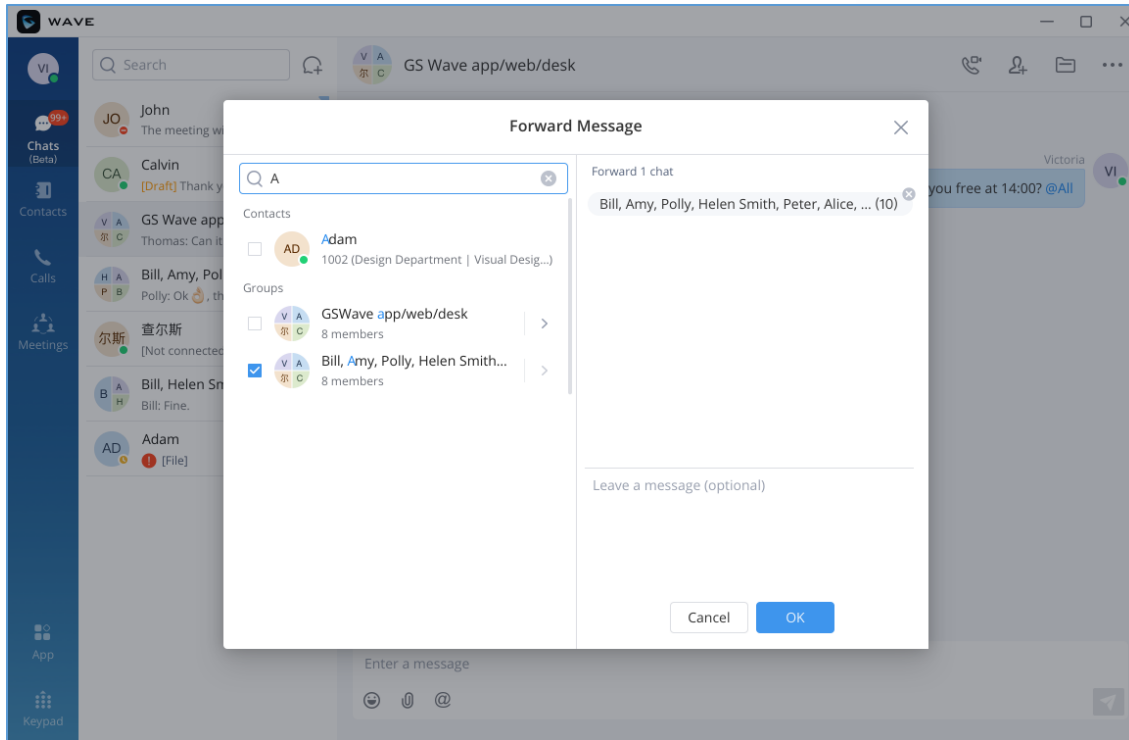
Figure 38: Copy Message

## Forward Message

**Step 1.** In the chat interface, select a message, with right-click select "Share".

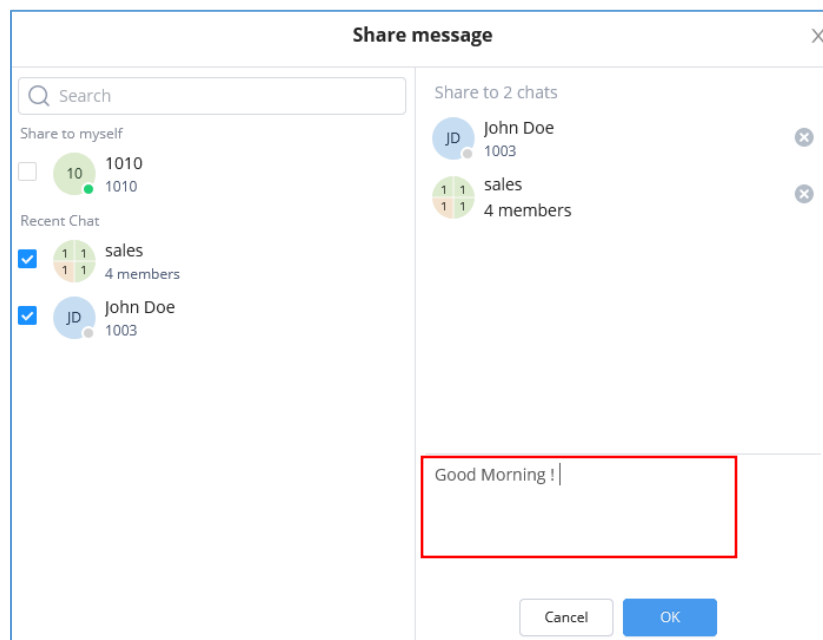
**Step 2.** Check to forward to a contact or group.





**Figure 39: Forward Message**

**Step 3.** (Optional) Write a message and click the "OK" button to forward the content of this message to the selected person or group.

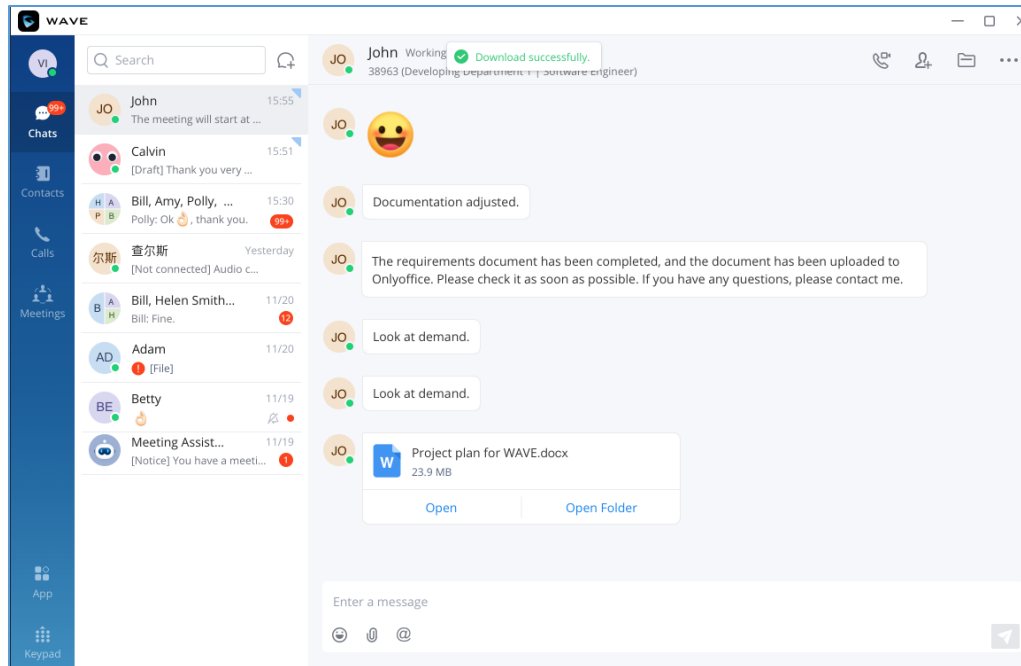


**Figure 40: Leave a Message**



## Unread message


In the "Chat" tab, users can view the latest unread messages. Tap to enter the chat interface to view new messages.



**Figure 41: Unread Messages**

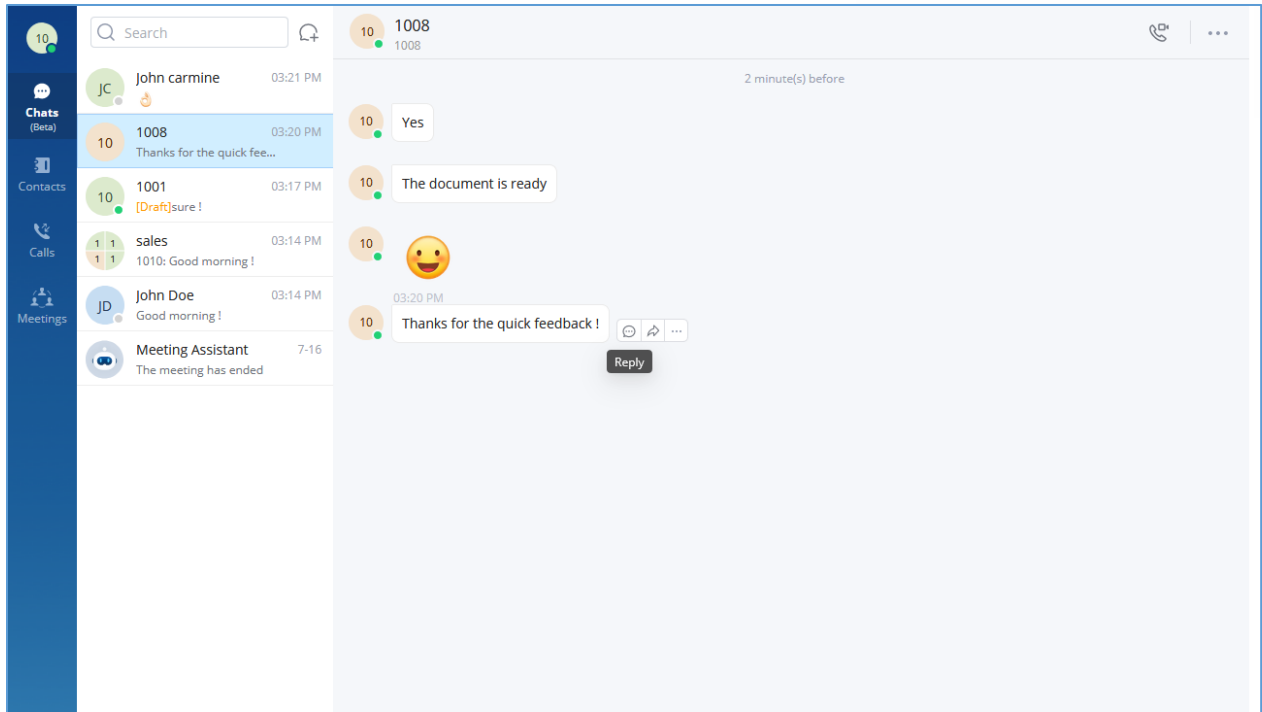
In addition, by clicking on the chatbox of a person or a group, users can view the history of chatting.

## Quote to Reply Message

**Step 1.** In the chat interface, the user can select a message, right-click the message and click the "Reply" option or click the button  next to the message.

**Step 2.** The user can reply to the message in the message box.






**Figure 42: Quote to reply message**

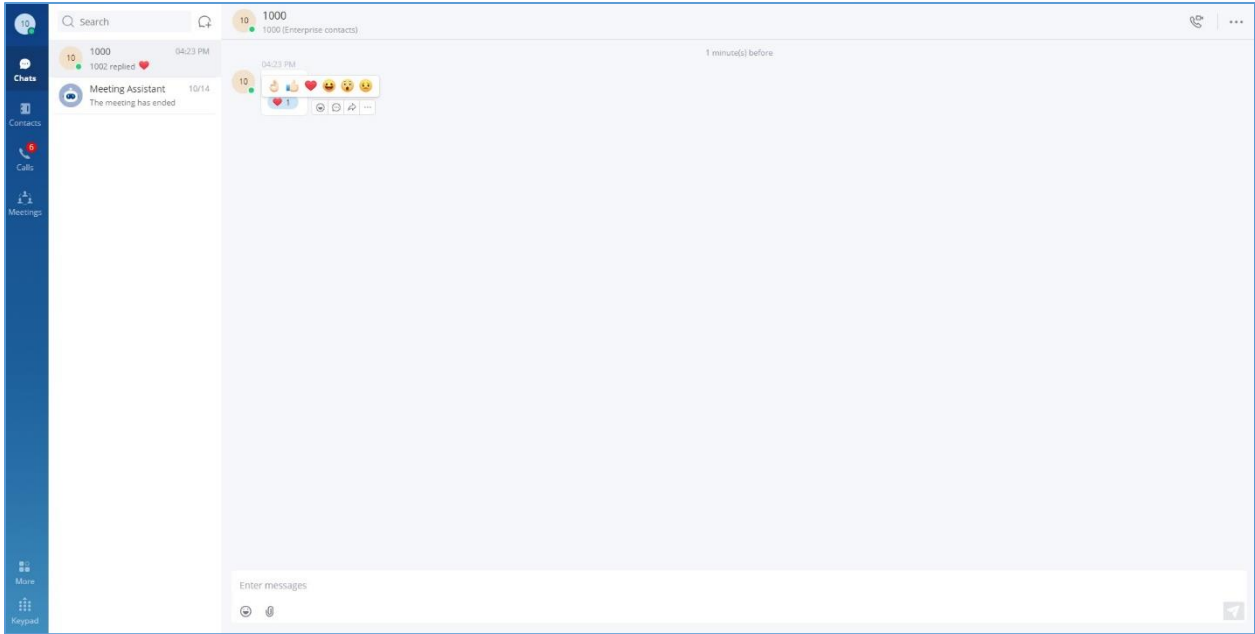
## React with Emoji

In the chat interface, users can react to the sent/received messages in the single/group chat, files, and images with emojis.

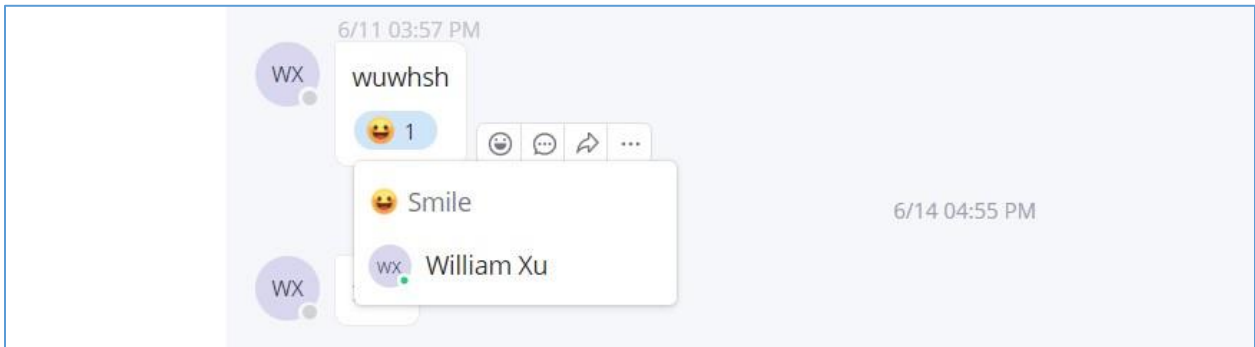
- Click on  option and select a specific emoji. The reaction emoji and the emoji amount will be displayed under the corresponding message, as the screenshot shows below.
- For the same message, each member can only react with 1 single emoji. If the member reacts to the message with another emoji again, the previously reaction emoji will be replaced.
- If the member clicks the same emoji as the reaction emoji again, the reaction will be canceled.
- If the user moves the mouse over the emoji, the user can view the member who reacted to the message with the emoji.







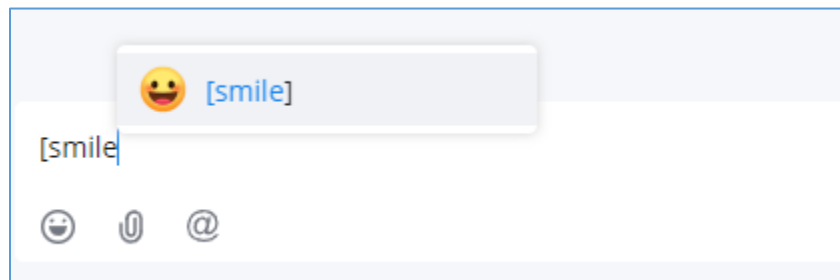
**Figure 43: Reply with Emoji**



**Figure 44: View Emoji Details**

## Reply quickly with an emoji shortcut

Emojis will be displayed in the chat box for preview after you type their respective shortcuts, e.g: if you type [Smile] in the chat box, the emoji 😊 will be shown.



**Figure 45: Emoji Quick Reply**



## Edit the sent text

In the chat interface, users can edit the sent text and resend the edited message.

**Step 1:** In the chat interface, the user can select a sent text message, and right-click to edit the message.

**Step 2:** Re-edit the contents in the input box.

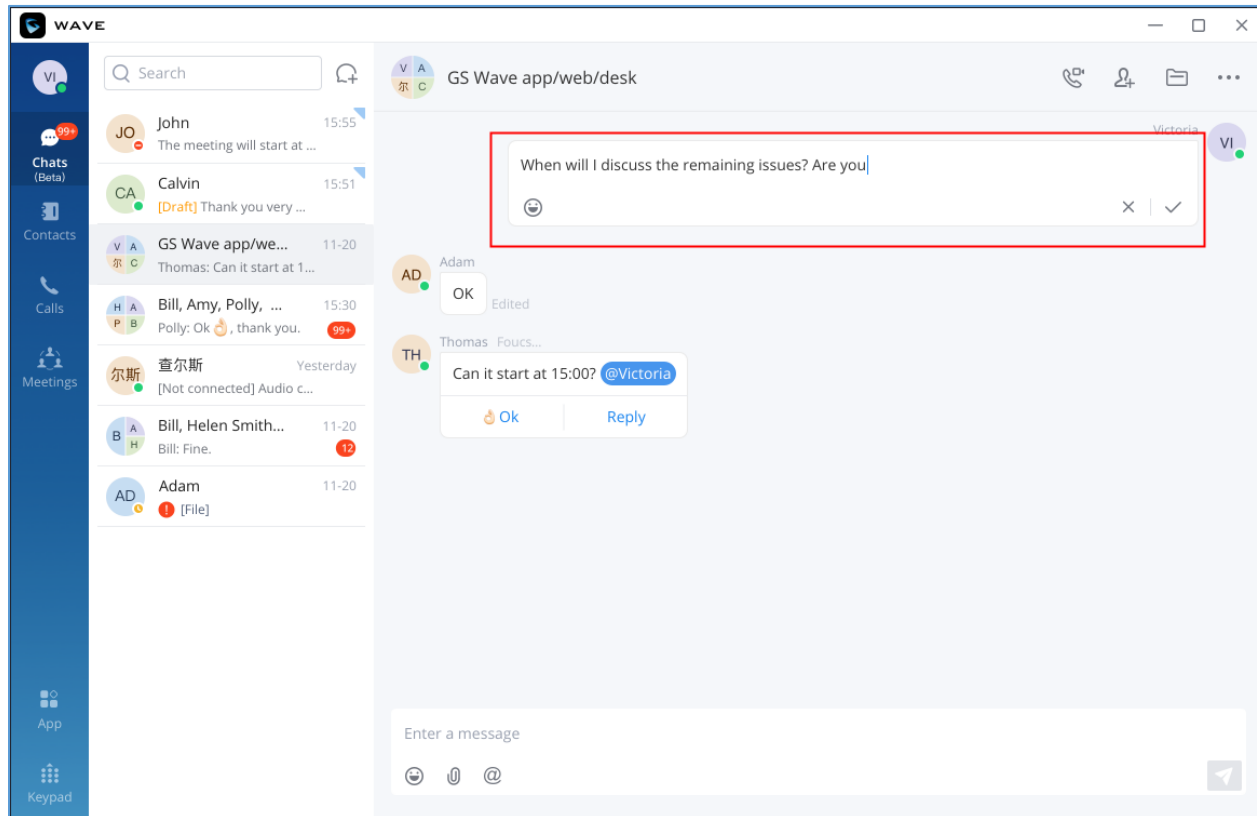


Figure 46: Edit the Sent Text

### Note:

1. Images, videos, and files are not supported to be edited. The re-edited contents can only be added with text and emojis.
2. The re-edited contents are limited to 5000 characters.

## Delete Message

**Step 1.** In the chat interface, the user can select a message and right-click the message, and click the “Recall” button to recall the message.

**Step 2.** After recalling the message, the remote party will delete the message synchronously.

**Step 3:** The deleted text can be re-edited by the user.



**Note:** After recalling the message, the message will be deleted permanently, and the message cannot be recovered.

## Pin Chat Box

In the chat list, the user can select a point-to-point chat or group chat and set the chatbox to the top of the chat list. When the chatbox has been set to the top of the chat list, the user can quickly find the chatbox and reply to the message.

The user can also click the chatbox and unpin the chatbox.

## Hide Chat Box

In the chat list, the user can select a point-to-point chat or group chat and set it to hide the chatbox. Then, the chatbox will be hidden in the chat list.

**Note:** The chat history will not be deleted after hiding the chatbox. When the user receives a message from this chat box in the future, the user can also view the chat history.

## DND

If the user needs to mute the new message notification of a chat, the user can select a point-to-point chat or group chat in the chat list and set it to “DND.”

If the user wants to resume notification of new messages for the chat, the user can select the current chatbox and cancel the DND setting.

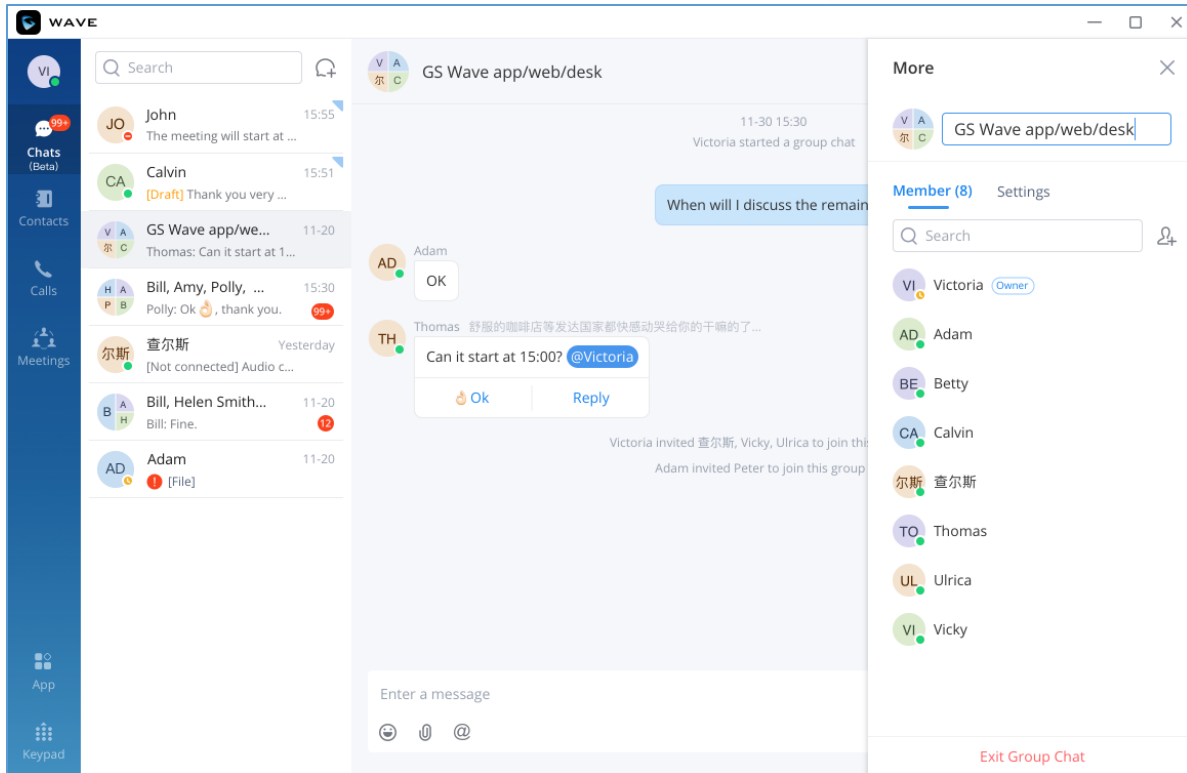
## Group Management

### Change Group Name


Both the group owner and group members can change the group name and do so, kindly follow the below steps.

**Step 1.** On the chat page, open the group chat page and click on the upper right corner to view group information.



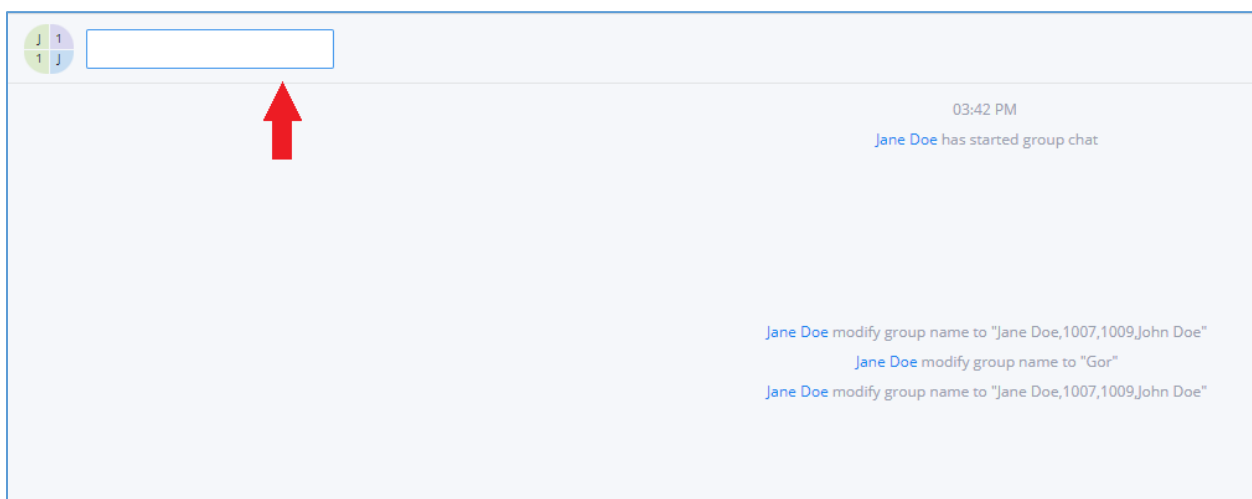


**Figure 47: Change Group Name**

**Step 2.** By clicking on  , users can modify the group name. The group name supports a maximum of 80 characters.

**Step 3.** After the modification is completed, click anywhere to save successfully.

Or You can directly click on the chat group name to edit it quickly, as shown in the screenshot down below:



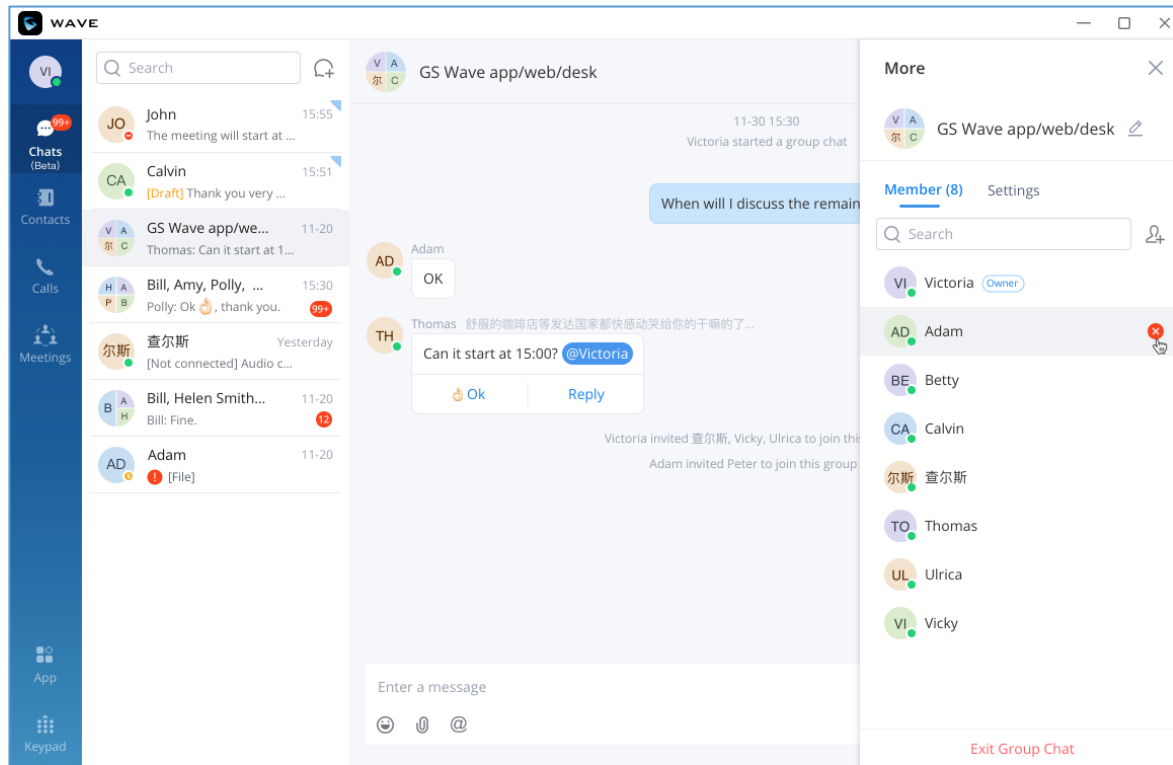
**Figure 48: Quickly Change Group Chat Name**



## View Group Members

Both the group owner and group members can view the group members.

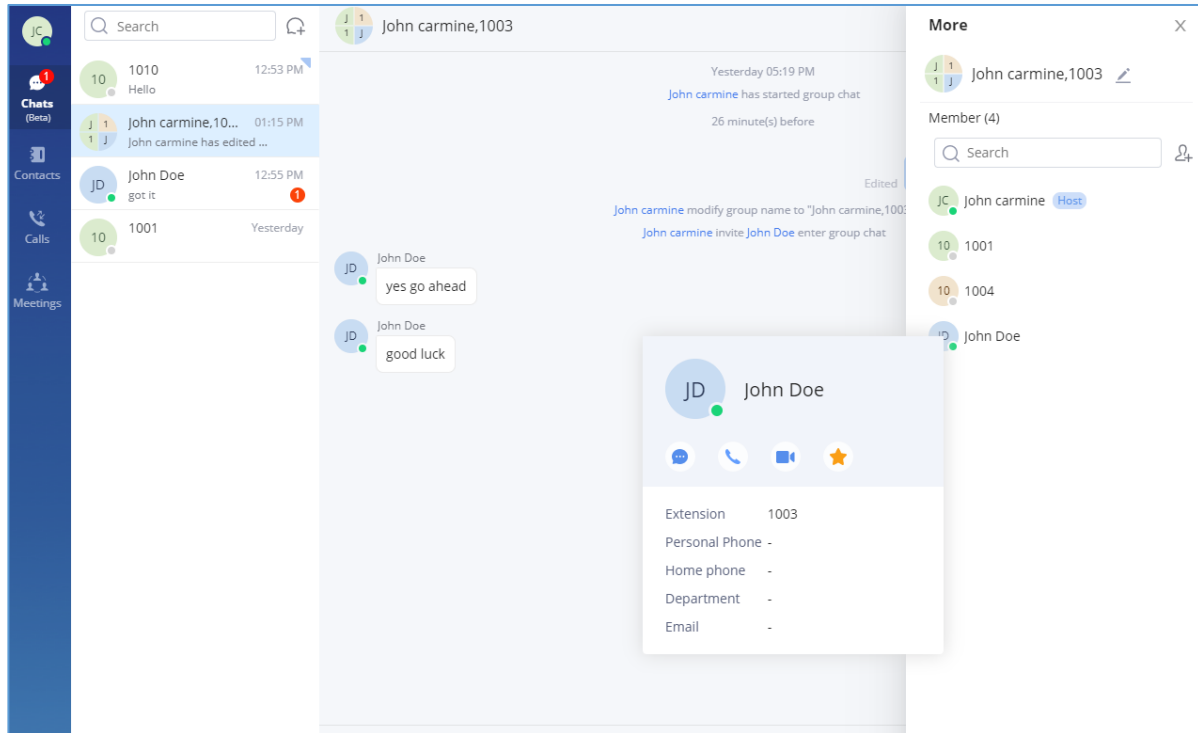
**Step 1.** On the chat page, open the group chat page and click on the upper right corner to view group members.



**Figure 49: View Group Members**

**Step 2.** Click on the avatar of the group member to view the detailed information of the member, send messages, and make calls.






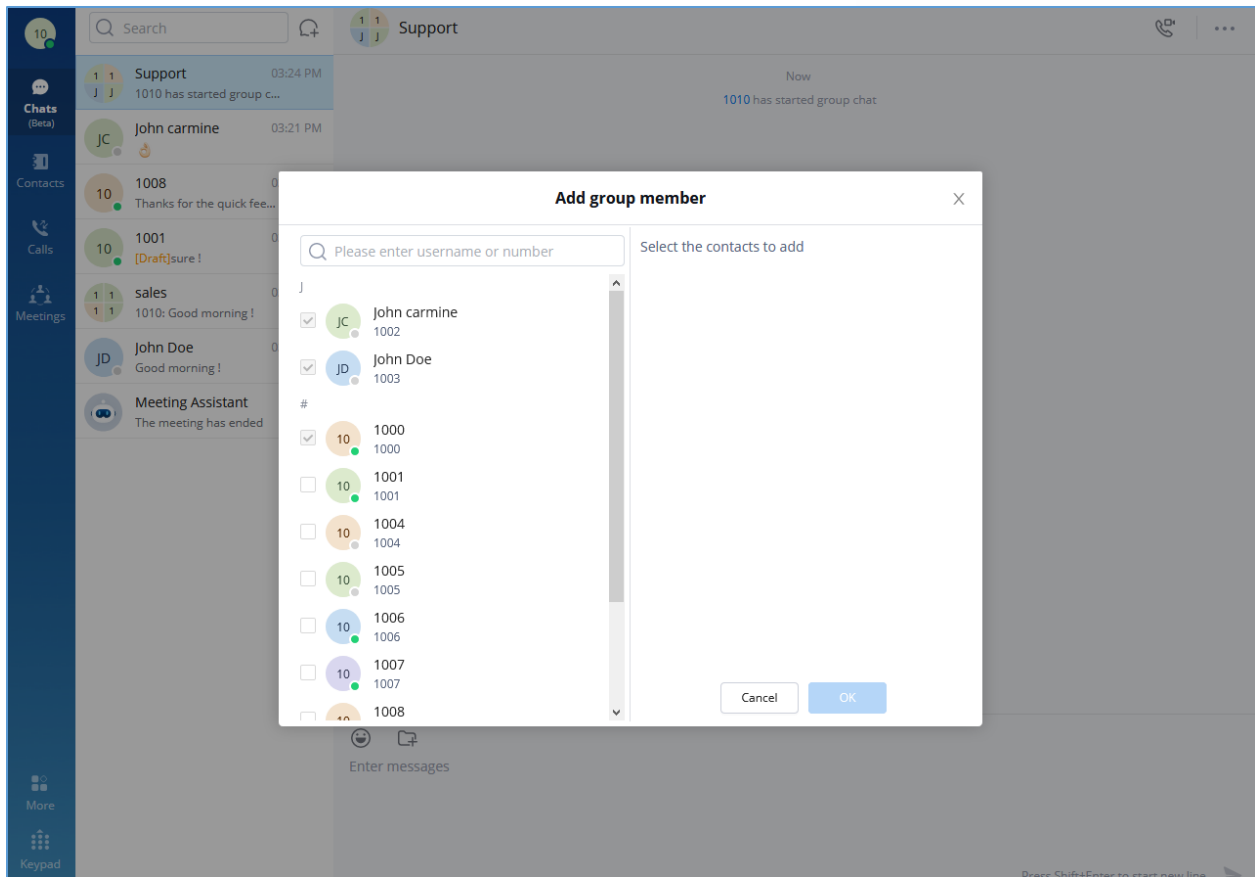
**Figure 50: Group Member Business Card Interface**

## Add Group Members

Both group owners and group members can add group members.

**Step 1.** On the chat page, open the group chat page and click on the upper right corner, then click on  to enter the contact selection page.





**Figure 51: Add Group Member Interface**

**Step 2.** Select the contact you want to add or search for a contact by name and select it.

**Step 3.** Click the "OK" button to immediately add the selected contact to the group chat.

**Notes:**

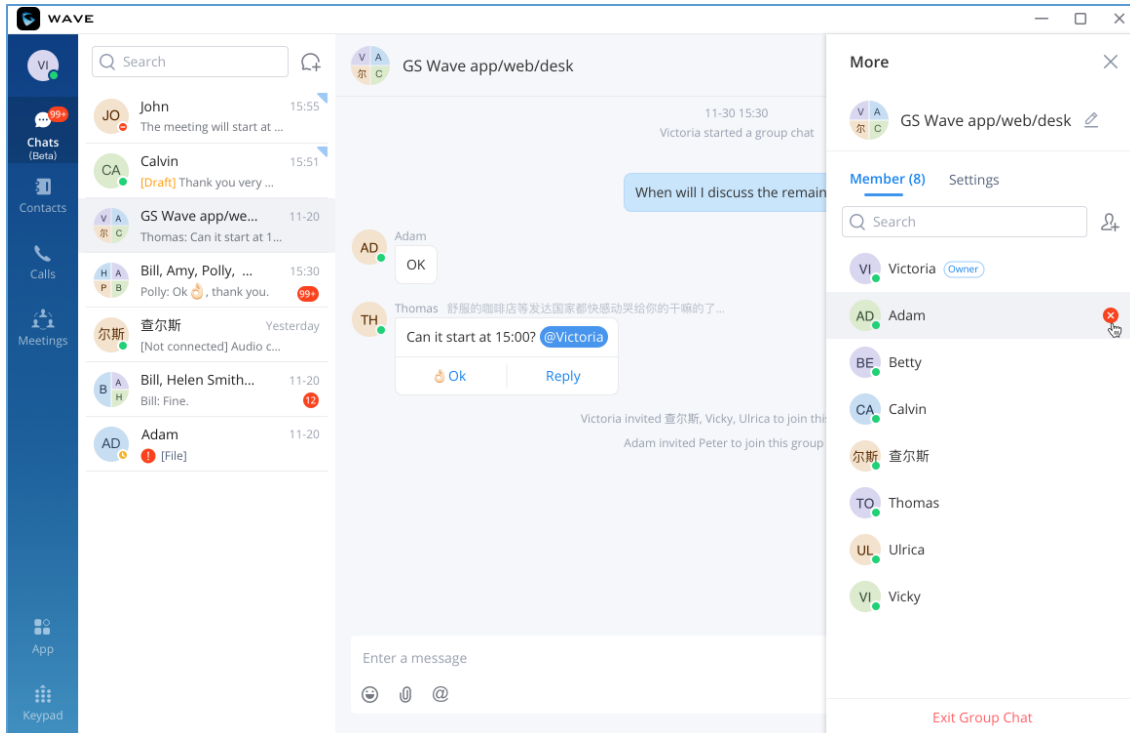
1. The newly joined members in the group chat cannot view the group chat history by default (Only the group owner can set the chat history that the group members can view: No, All, 1 Day, 7 Days).
2. The maximum group membership is 500 people.

### Delete Group Members

Only the owner can delete group members.

**Step 1.** On the chat page, open the group chat page and click on the upper right corner, and hover over the profile picture of the member you want to delete.





**Figure 52: Delete Group Members Interface**

**Step 2.** Click behind the member to delete this member.

**Step 3.** After confirming the deletion, this group member exits the group chat and can no longer view the group chat messages.

**Note:** After deletion, only the deleted member will be notified, not everyone.

## Exit Group

Only group members can leave the group.

**Step 1.** On the chat page, open the group chat page and click on the upper right corner, then click "Exit Group Chat" at the bottom.

**Step 2.** After confirming to log out, you will no longer accept new messages from this group and cannot view the group history messages.

**Note:** After logging out, only the group owner will be notified, not everyone.






## Dismiss Group

Only the group owner can dismiss the group.

**Step 1.** In the chat interface, the user can open the group chat interface and click the button on the right

upper corner  , then click the “**Dismiss Group**” option at the bottom of the interface to dismiss the group.

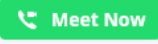

**Step 2.** After dismissing the group, all members of the group will be removed, and the group chat history cannot be viewed.



## MEETING ROOM

Users can join an audio or video meeting on UCM by dialing the room number. After logging in to Grandstream Wave web, click on “Meetings” on the left panel to open the meeting page.

Users can view all meeting history in the Wave application, and it will show the actual duration of the previous meetings, as well as the participants' list of the previous meetings.

Users can create a meeting to start now by selecting  or to schedule a meeting by clicking  on the top of this page.

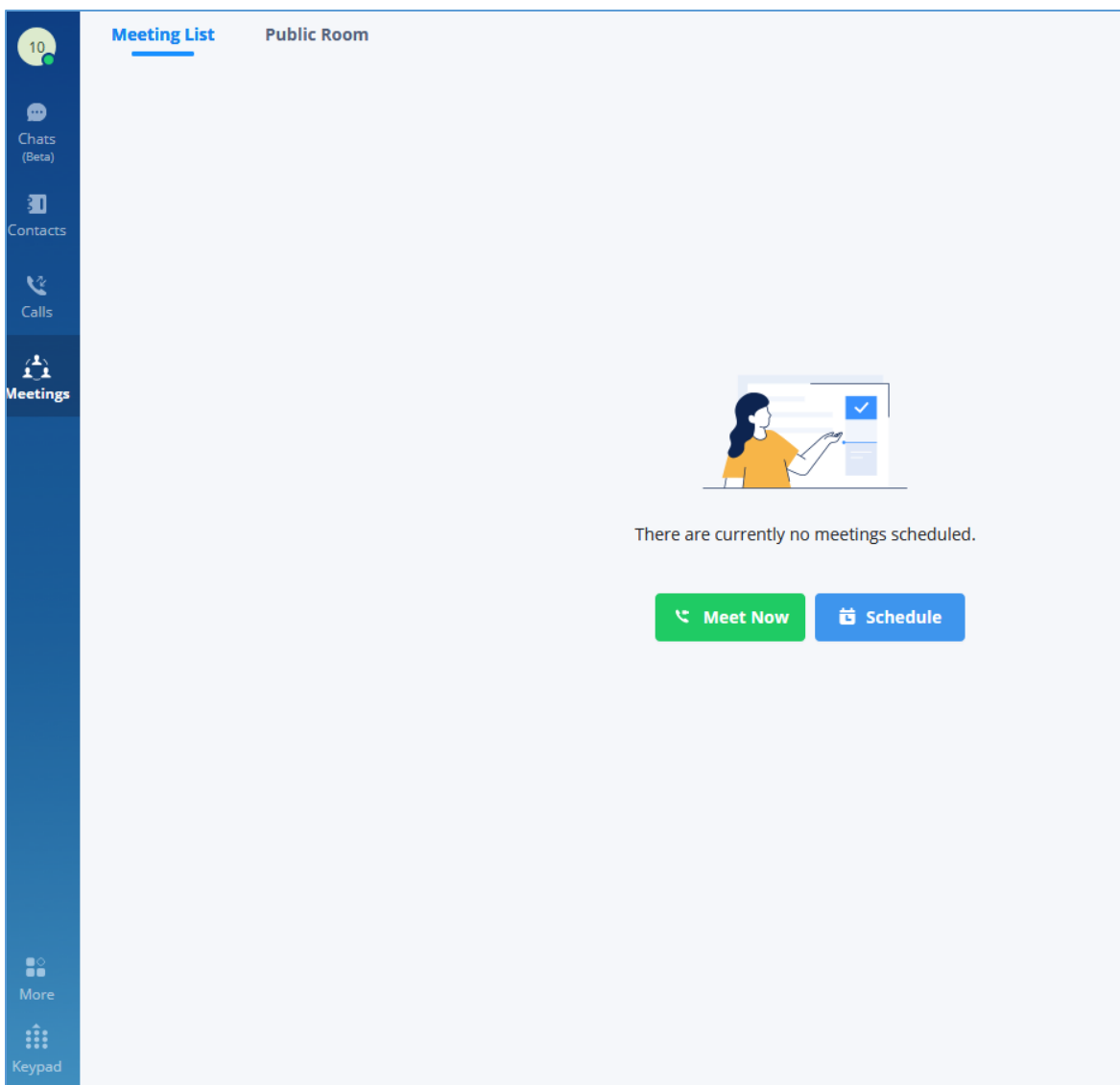



Figure 53: Grandstream Wave Meetings Web Page



Users can view scheduled meetings by selecting “Daily”, “Weekly”, “Monthly” and defining the date range. Click  to search meeting by meeting subject, creator, meeting room number.

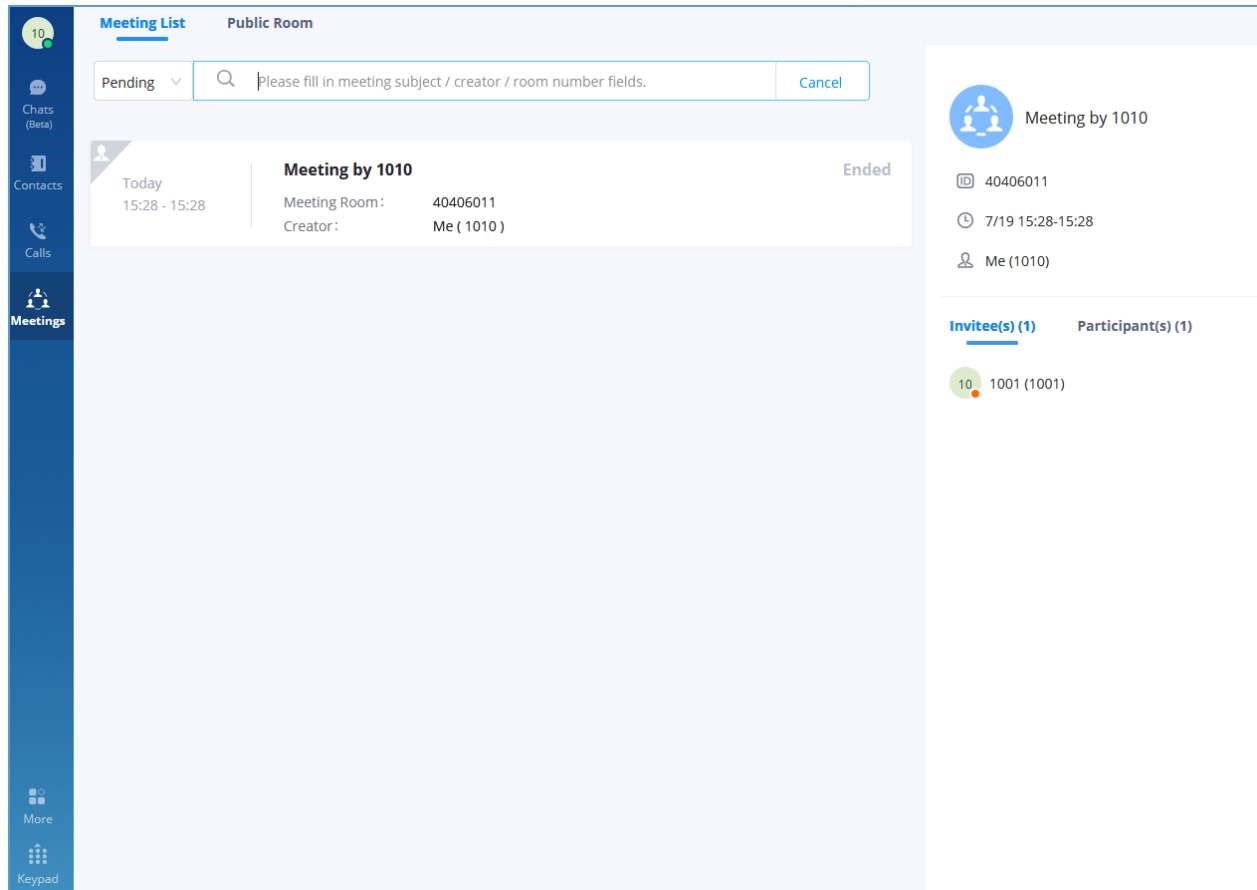
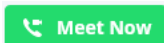
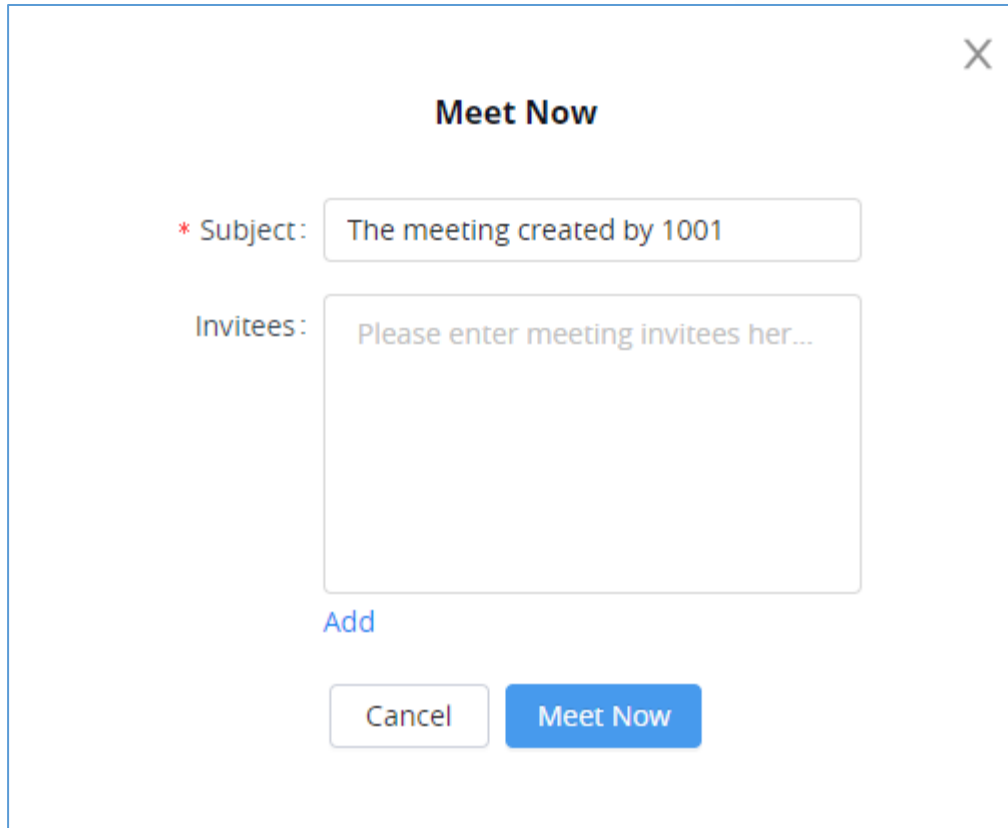


Figure 54: Search Meeting

## Meet Now

1. On the top of the meeting page, click on .





**Meet Now**

\* Subject: The meeting created by 1001

Invitees: Please enter meeting invitees her...

Add

Cancel Meet Now

**Figure 55: Instant Meeting Interface**

**Step 1.** The user needs to enter a meeting subject.

**Step 2.** The user needs to enter the invitee's number or email address or click the **"Add"** button to invite the participants from the contacts or group.

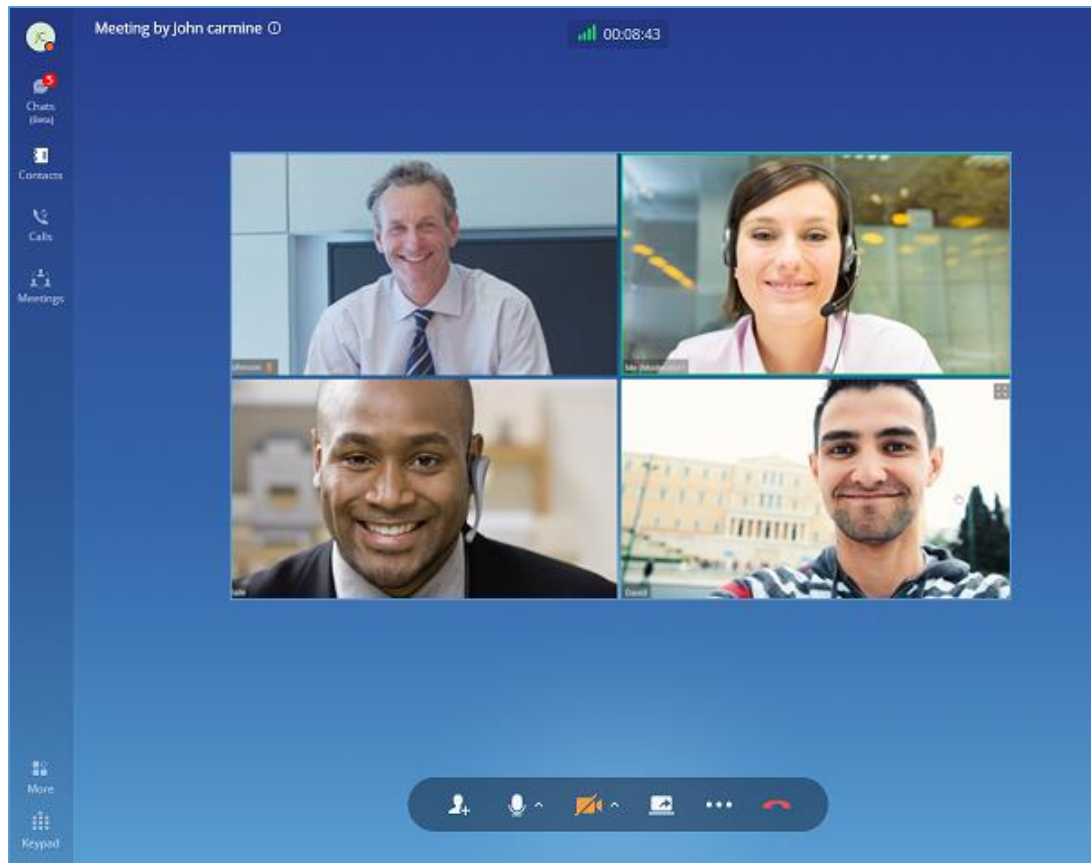
**Step 3.** The user can click the **"Instant Meeting"** button to start an instant video meeting immediately and invite participants to join the meeting.

**Note:** After creating the instant meeting, the video meeting number is a random meeting number. If the user wants to use the public meeting room, the user can access the public meeting room list and join the public meeting room.

**Note:** The audio or video meeting room must be created and pre-configured by the UCM admin before users can join any meetings.





## Conference

Users can click the “**Video on**” or “**Video off**” option during the conference to switch between video/audio conferences. The picture below is showing the call interface after joining the video conference room.









**Figure 56: Video Conference Screen**


Below are the available meeting control options:


- : View network condition status such as packet loss for video and audio.
- : Invite participants. If the UCM admin has enabled “Allow User Invite” for the meeting room, any participant in the meeting can invite other participants. Otherwise, only the moderator can invite other participants.
- : Mute/unmute. Users can click the “**More**” button to enter the alternative ringing speaker settings interface.
- : Video on/off. Click to enable/disable the local video feed. Users can click the “**More**” button to enter the virtual background settings interface.



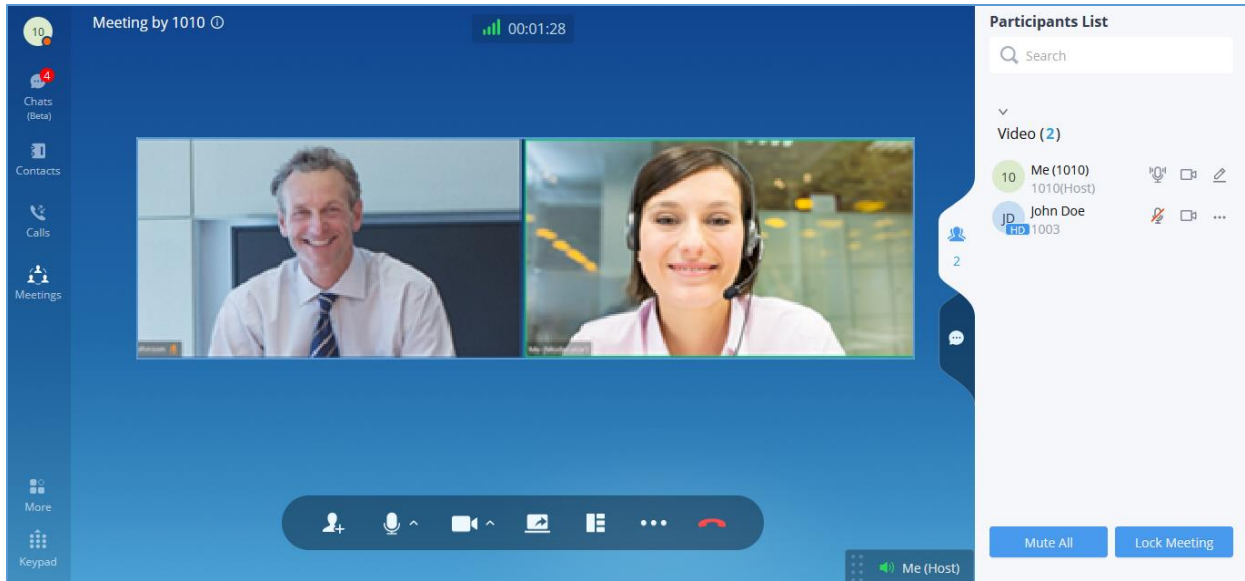
- : Screen sharing. Click to start screen sharing. Only one participant can share screen at a time. If a participant already shares the screen, this icon will be grey and other participants cannot click on this icon to share.
- : Switch video layout to be tiled or focus. Please note this only affects local video layout and does not change other participant's video view.
- : More options. The user can click this button to open the DTMF soft keyboard and display the chat bubble function.
- : End call.
- : View participant list. Click to open the participant list. The user can view participants' mute/unmute status, search for a participant, modify display name, chat with participants, etc.
- : Chat. Click to open the chat window and enter chat text.

To become meeting host:

- **Host Meeting:** If there is no meeting host in the meeting, the user can click the “More” button  and select the “Host Meeting” option to become the meeting host.
- Manage participants:

Click on the icon  on the right-side menu to open the participant list. The moderator can mute/unmute participants, turn on / off video for participants, transfer moderator to another participant, remove a participant from a meeting, etc. The moderator can also mute all participants and lock the meeting room (no one can join the meeting room).






**Figure 57: Managing Participants in Video Conference**

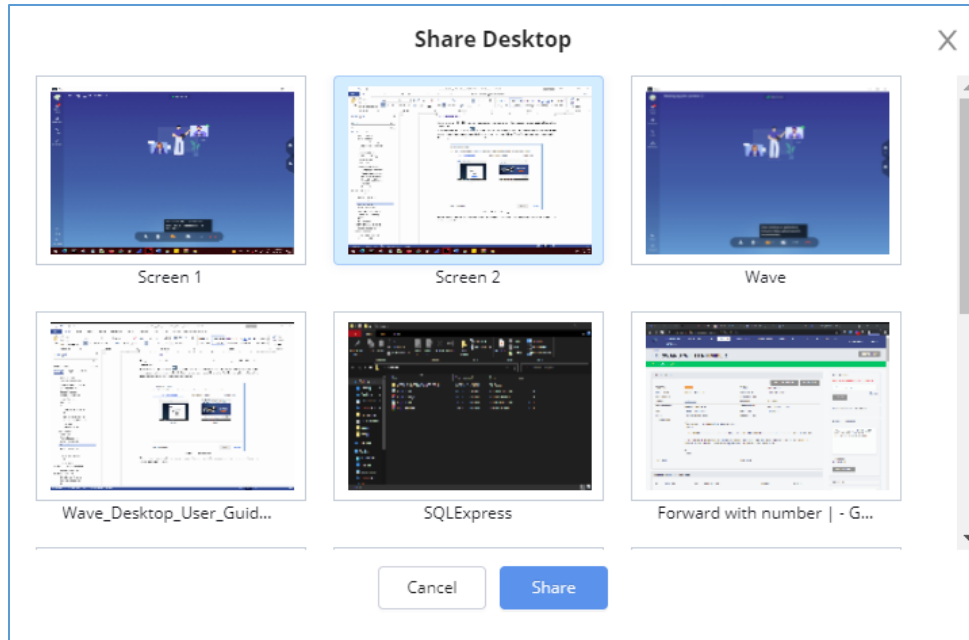
## Screen Sharing

During point-to-point video calls or video conferences, users can share screen to present to all the other participants.

After the users click on the icon , a prompt will be displayed for users to select whether to share the entire screen, application window, or the web browser tab, then click on “Share” on the prompt to start sharing.

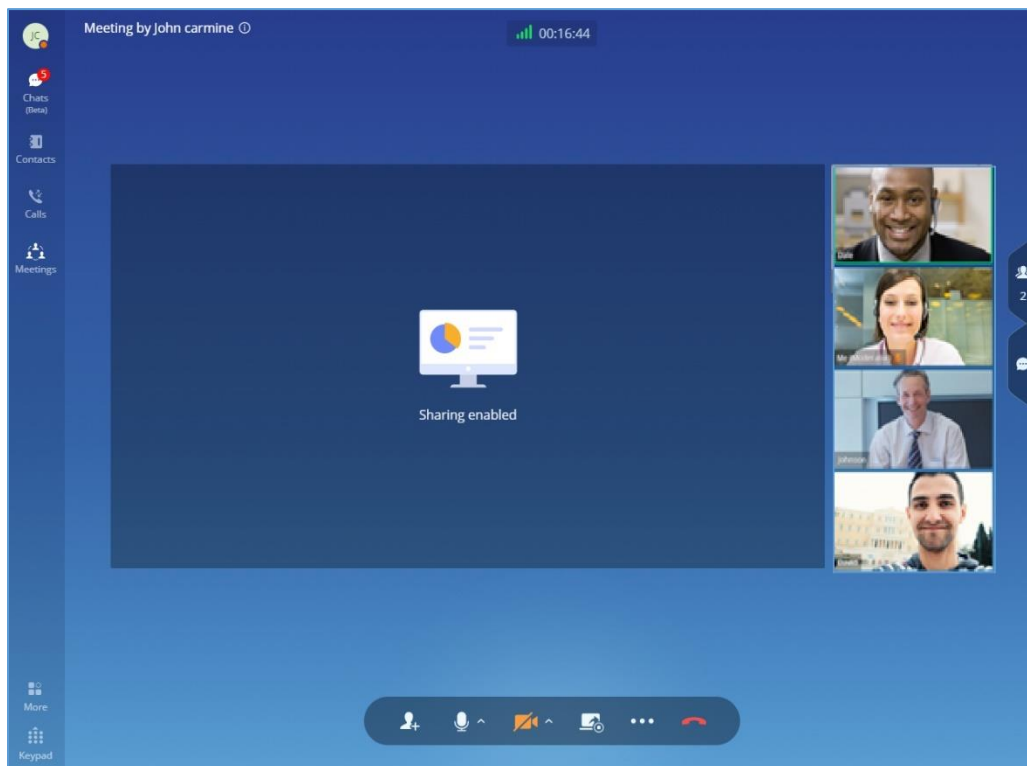
**Note:** Only one user can share a screen at a time.





**Figure 58: Screen Sharing**

During screen sharing, the users can double click on the sharing screen or video screen to enlarge the display area to full screen.



**Figure 59: Screen Sharing with Video on**

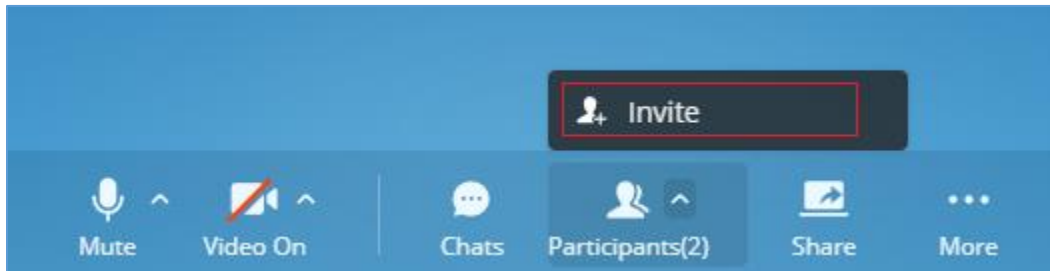




## Invite Participants

If the UCM admin has enabled “Allow User Invite” for the meeting room, any participant in the meeting can invite other participants. Otherwise, only the moderator can invite other participants.

Users can invite other participants by generating a meeting link or QR code, dialing other participants, or sending a direct invite. You can also invite participants after the meeting has started by navigating to the bottom menu and select the option shown in the screenshot down below:



**Figure 60: Quickly Invite The Participants**

- **Create invitation link:**

After selecting “Create Invitation Link,” users will be prompt with link information as below. The users can send the link or QR code to other parties for them to join the meeting.

Meeting Information    Invite Participants    ✕

---

**Meeting by Jane Doe**


Meeting Room:    80503005

---

Effective Duration:    01:59:02 🔄

Local URL:    <https://192.168.5.167:8090/#/invite/anonymous/80503005/1639752392/0/0>

Remote URL:    [https://\[REDACTED\]/invite/anonymous/80503005/1639752392/0/0](https://[REDACTED]/invite/anonymous/80503005/1639752392/0/0)

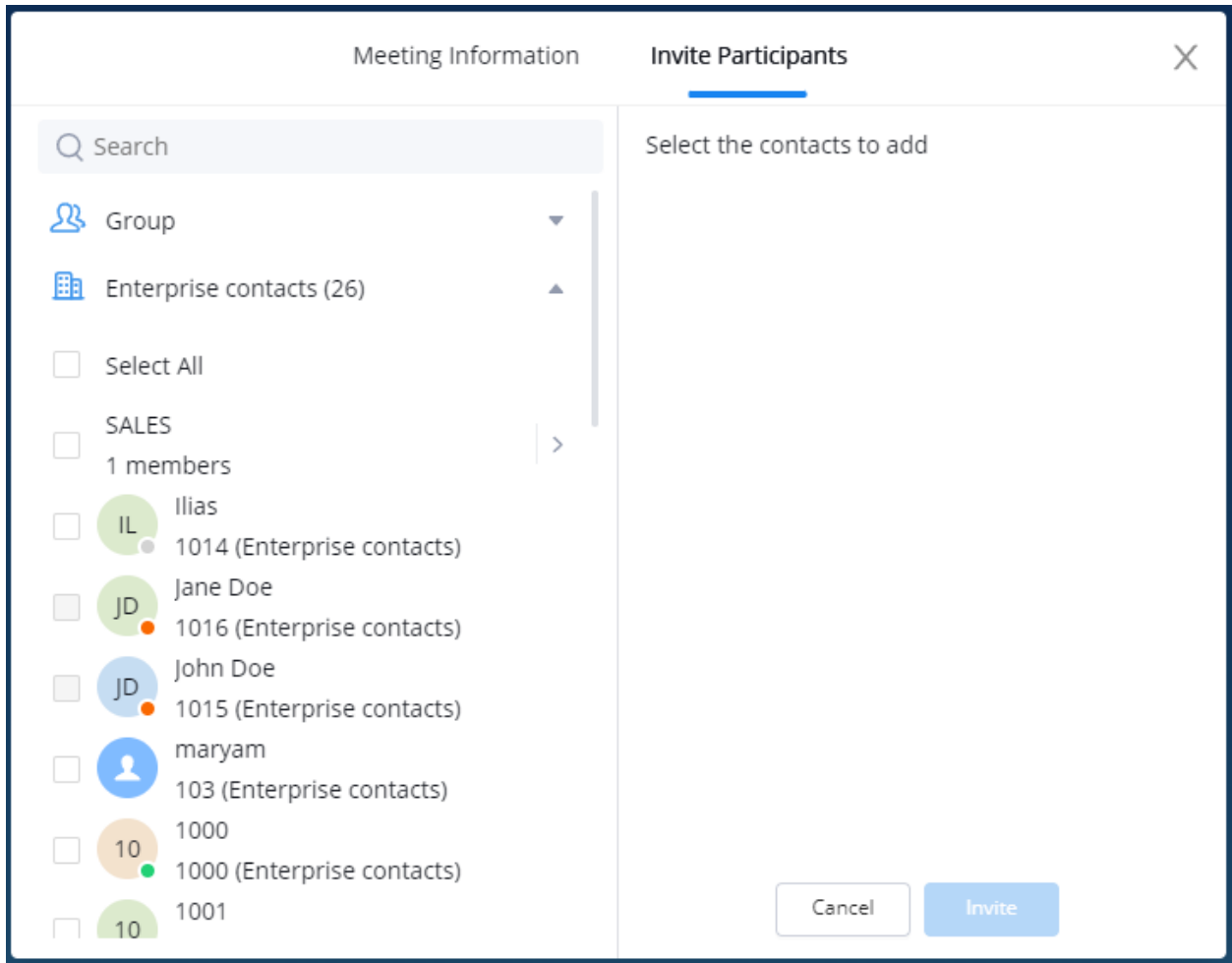


Join meeting via QR code

Copy    Download QR Code

Figure 61: Link/QR Code to the meeting

- **Invite participants:**




**Figure 62: Directly Invite Participants**

After selecting “Invite Participants,” users can select a contact to invite or enter the number to invite.

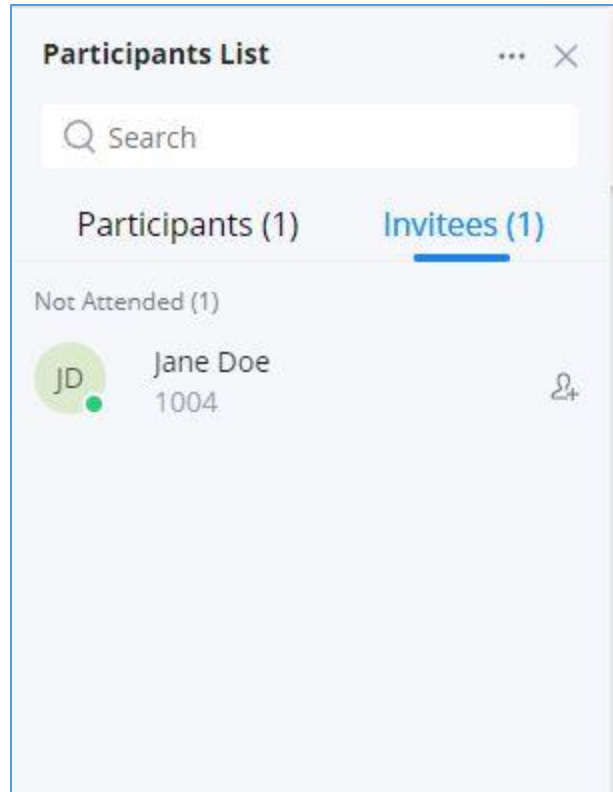
You can now quickly invite after starting the meeting had started, by navigation to the “Participants) button at the bottom of the screen as show in the picture below:

### Quickly Invite Participants

The meeting host can quickly invite participants who have not joined yet. To do this, the user needs to click

on  button in the menu bar at the bottom of the screen to bring the participants menu up:



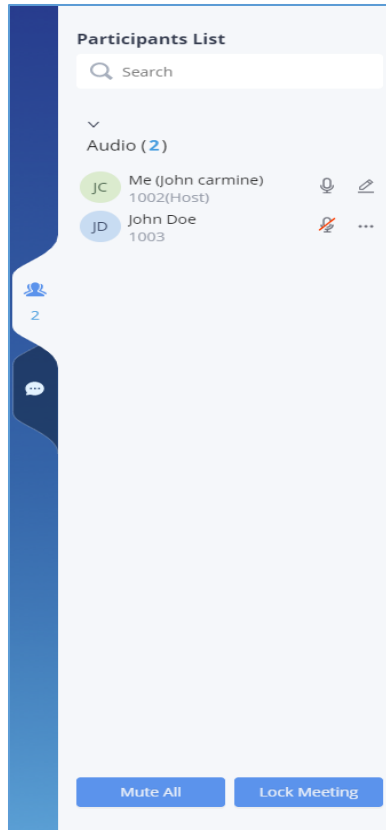


On the invitees tab, the user needs to click on  to quickly invite the participant.

## Managing Participants







During the meeting, click on the icon  to open the participants' list.







**Figure 63: Participants List**

Participants can view the list only, while the moderator has more options to manage the participants.

- : Modify display name.
- : This indicates the participant has the video on. If the moderator clicks on it, it will turn off the participant's video.
- : This indicates the participant has video off. If the moderator clicks on it, it will invite the participant to turn on the video.
- : Mute. This indicates the participant has the mic on. If the moderator clicks on it, it will mute the participant's mic.
- : This indicates the participant is talking. If the moderator clicks on it, it will mute the participant's mic.
- : This indicates the participant is muted. If the moderator clicks on it, it will turn the mic back on for this participant.



- : More options to operate for this participant, such as “Transfer Moderator”, “Remove” and “Chat”.
- : Chat. Click to open the chat window.
- Lock Meeting: Click to lock meeting so that no one can join the meeting room anymore.
- Mute all: Click to mute all participants in one click.

## Invitees List

If the current user is the meeting host, the user can view the list of participants who are not attending the meeting. The participants can only view the list of current attended participants. The meeting’s host can send an invitation to the people who have not attended the meeting or those who left. Please see the screenshot below.

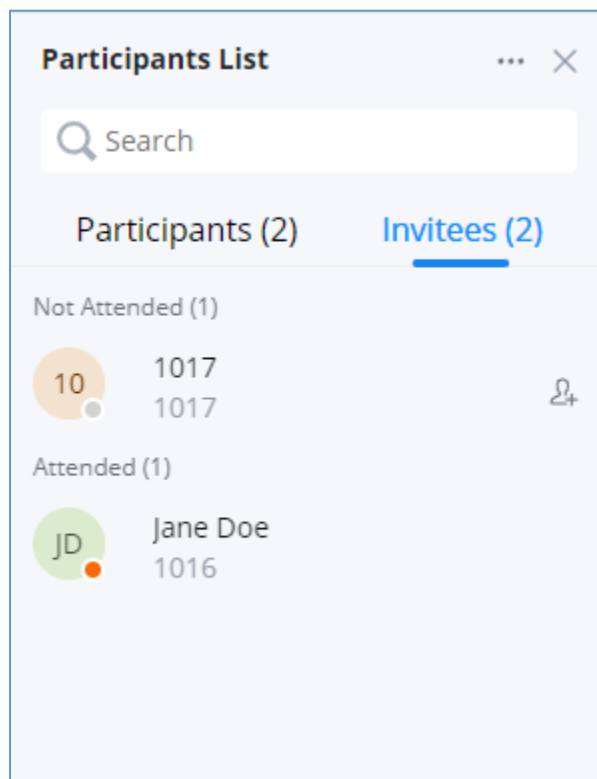



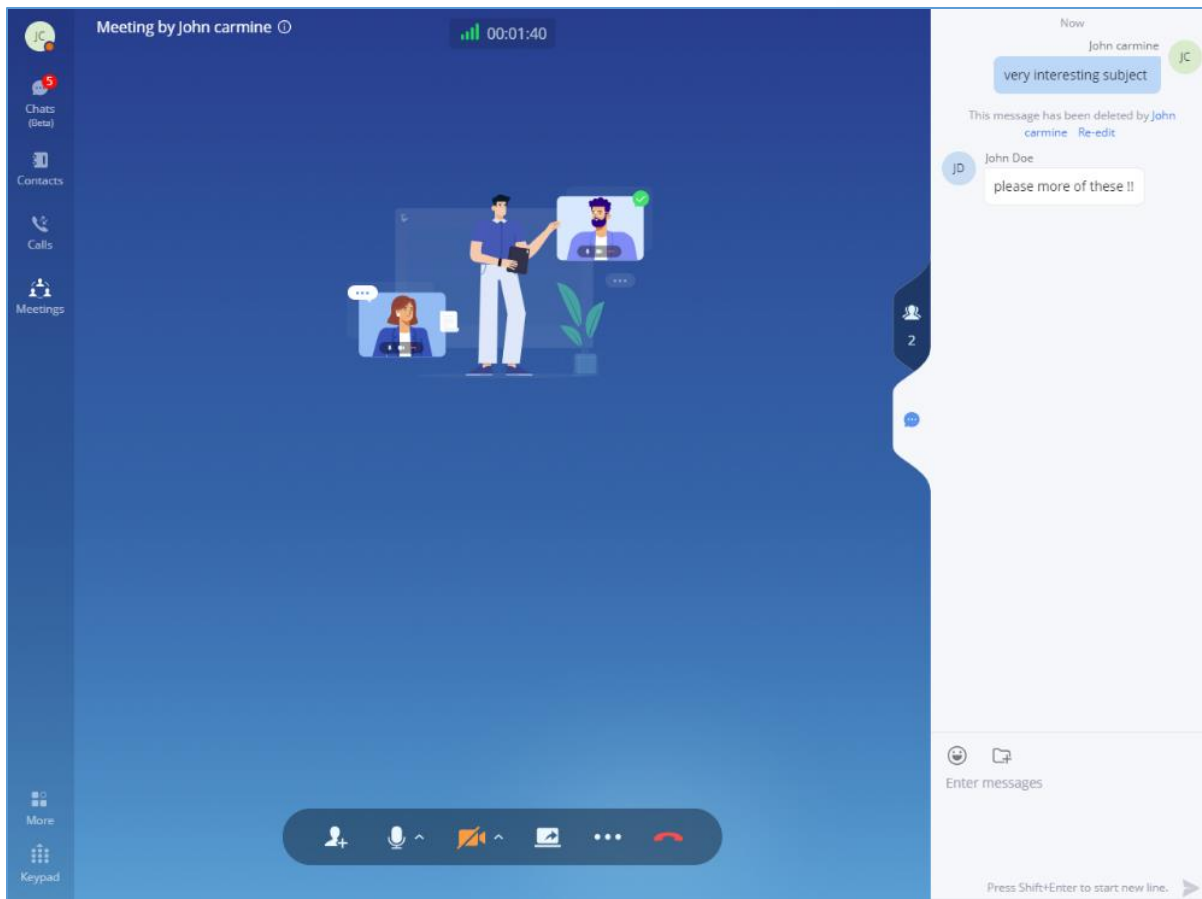
Figure 64: Invitees' List

## Chat during Meeting


During the meeting, users can click on  to open the chat window. The chat messages can either be sent





to a specific participant or all the participants.



**Figure 65: Chat during meeting**

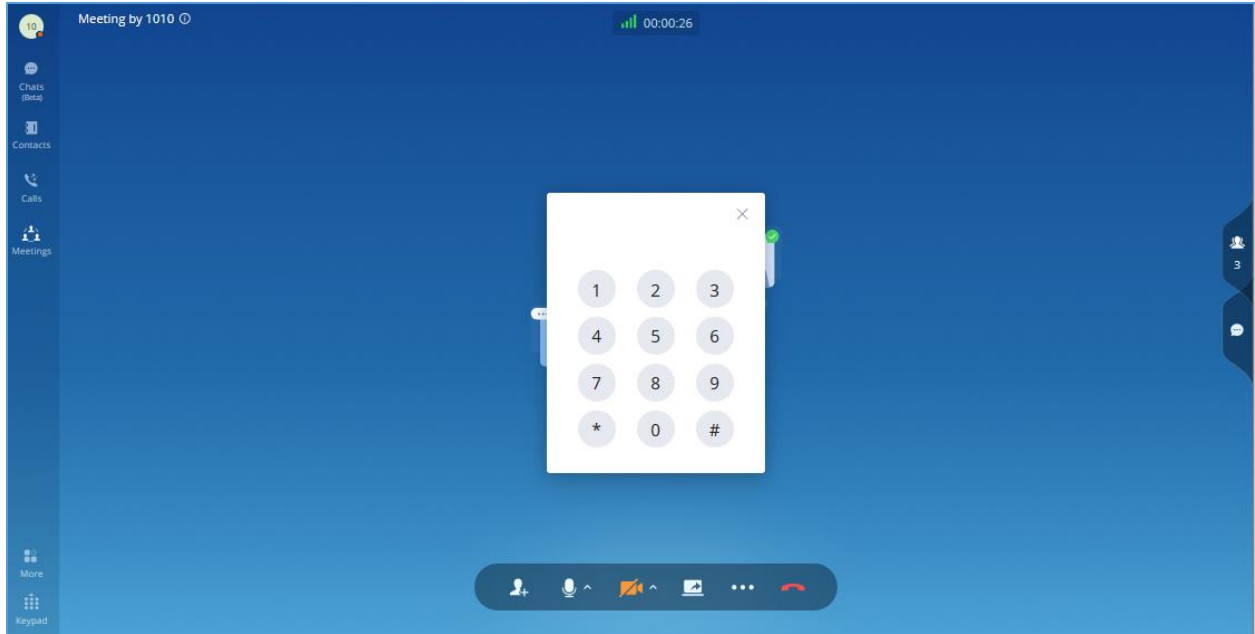
- The chat window not only displays all chat messages but also shows real-time notifications when a participant joins the meeting or leaves the meeting.
- Wave supports chat with members who join the conference via browser, PC client, and mobile APP.
- The user can choose to send a message to all members or select a specific member to send the message.
- Click the icon  under the participant list for a specific user to chat privately with him/her. Only supported for Wave users.

## DTMF

**Step 1:** During the meeting, the user can click the “More” button  on the menu and click the DTMF button  to open the DTMF soft keyboard, as the screenshot shows below.


**Step 2:** The user can click the digit button on the keyboard to enter the digits.





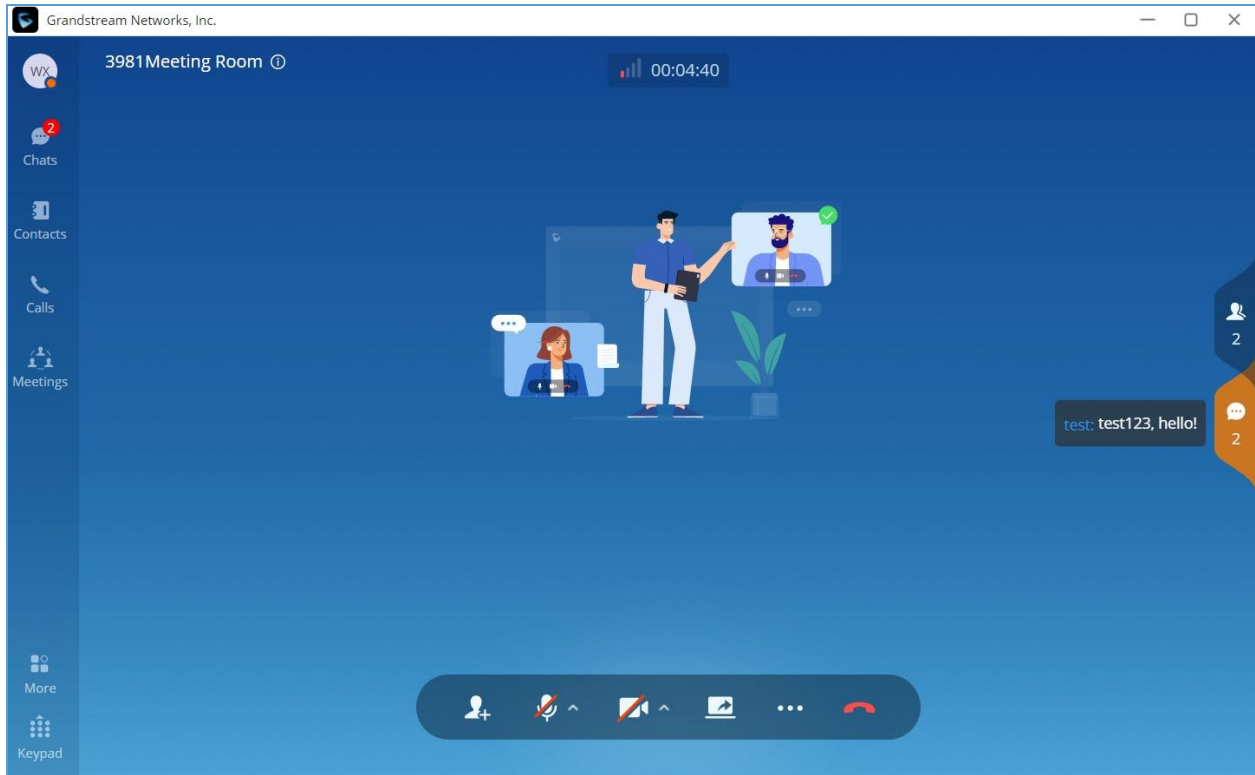
**Figure 66: DTMF Soft Keyboard**

## Chat Bubble

During the meeting, the user can click  button to enable the chat bubble function. If there is a new message during the meeting, the chat content will be displayed in the form of bubbles on the right side of the interface, as the screenshot shows below:





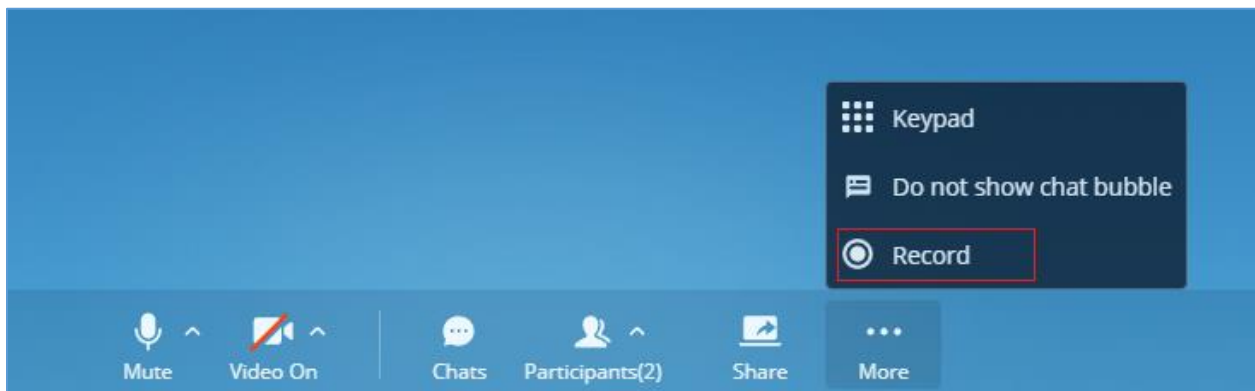


**Figure 67: Chat Bubble Interface**

## Record an Ongoing Meeting

During a meeting, the host can start recording it. To do that, you need to click on “More” on the menu at the bottom of the screen, then click “Record”.


When the meeting is ended, the meeting organizer can view the recording files in Meeting Details.



**Figure 68: Record an Ongoing Meeting**



**Important Note:** Only the meeting's host can record the meeting, and he/she will be the only one who can access the recording once the meeting is finished.

After the meeting is finished, the host can check the recording by navigating to the meeting tab, then select the meeting and after that click on the recording's icon  on the top right-hand corner. Please see the screenshot below.

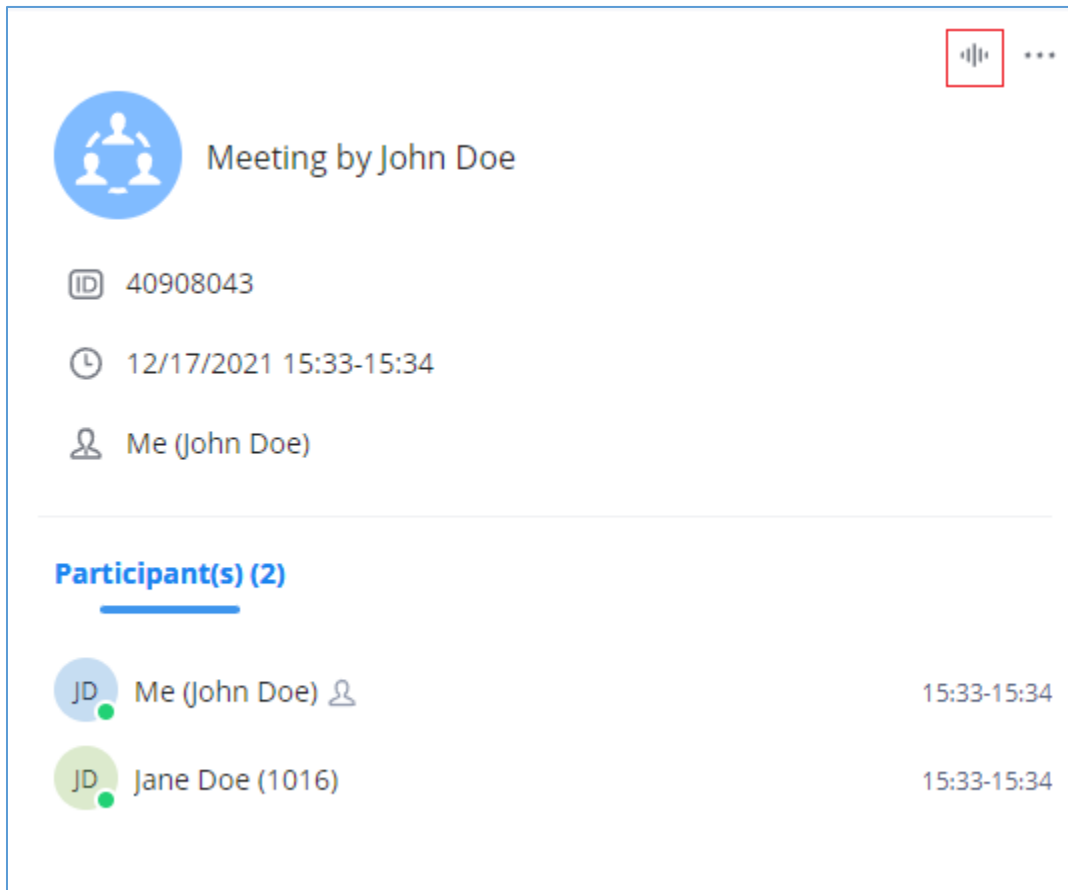
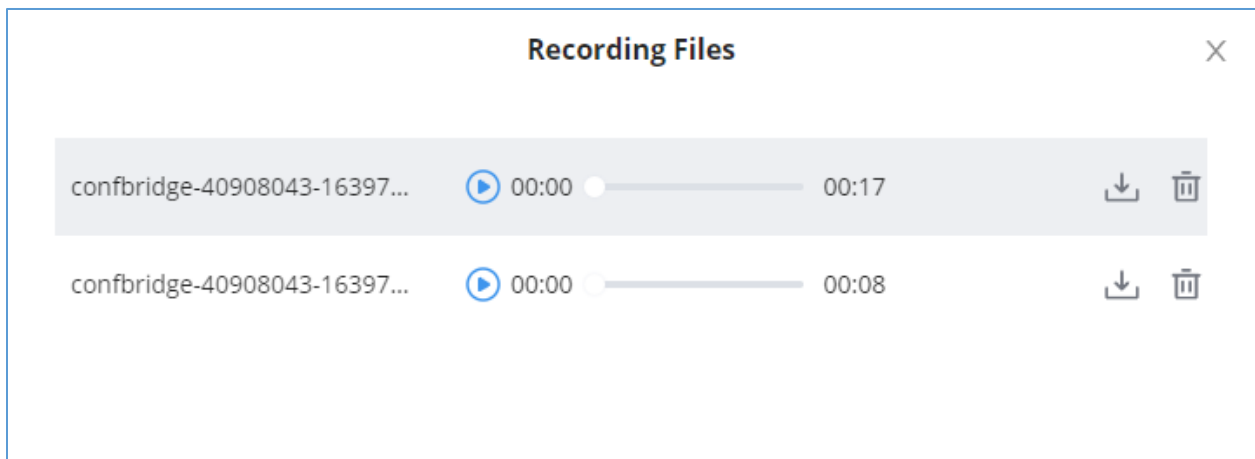



Figure 69: Meeting's Info


The recording files will appear with possibility to play them, download, or delete them



**Figure 70: Meeting's Recordings**

## End Meeting

When a meeting participant clicks on  to end the meeting, the participant will leave the meeting immediately.

When a moderator clicks on  to end the meeting, a prompt will be displayed asking the moderator to confirm whether to leave the meeting only or end the meeting. If the moderator selects leaving meeting only, Wave web will request the moderator to select another participant to be the moderator. After that, the user will leave the meeting while the meeting is still ongoing for the other participants. If the moderator selects ending the meeting, all participants will be disconnected from the meeting.

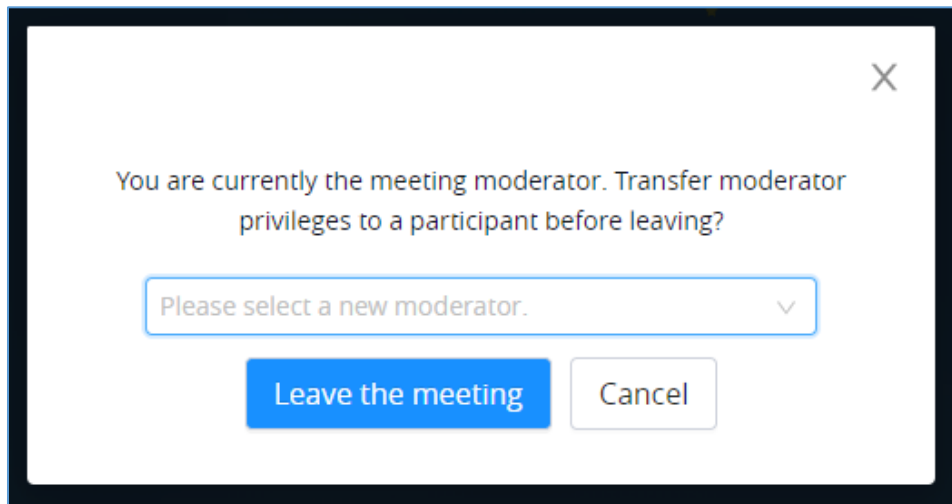
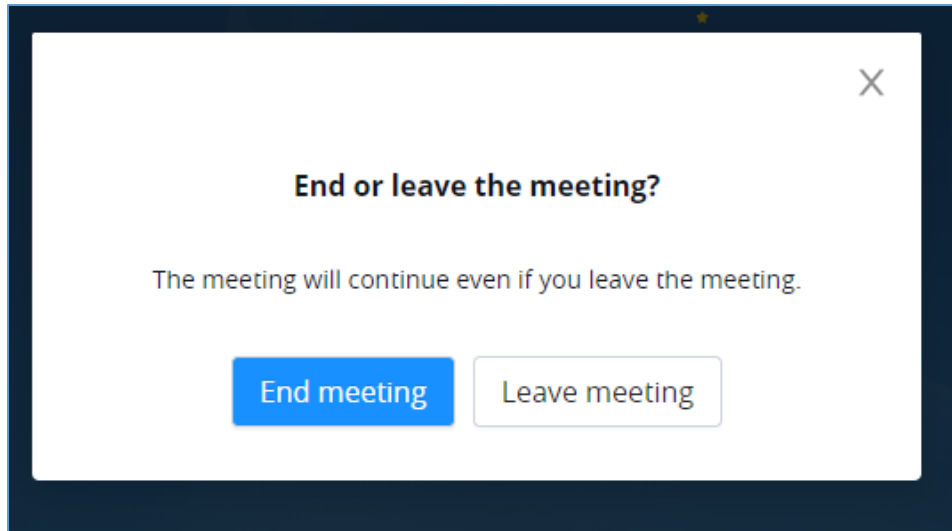

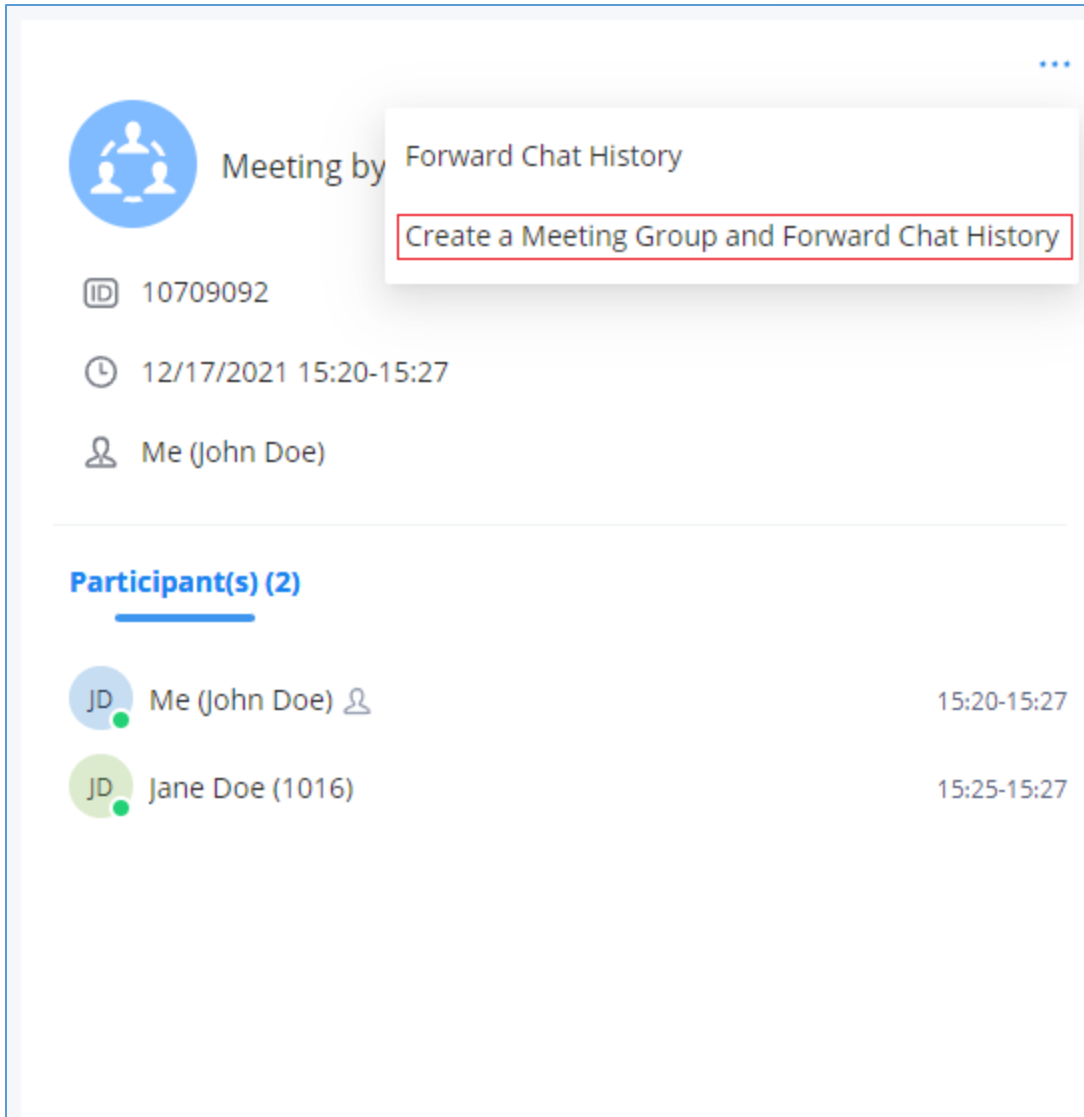


Figure 71: End Meeting as Moderator

## Meeting Chat Group

Only the meeting organizer can create a group that consists of the same members that were previously in a meeting, in case they wish to continue the discussion through text chat. The user needs to navigate to the "Meetings" tab, then on the top right-hand corner, click on the three dots  and select "Create and Forward Chat History".



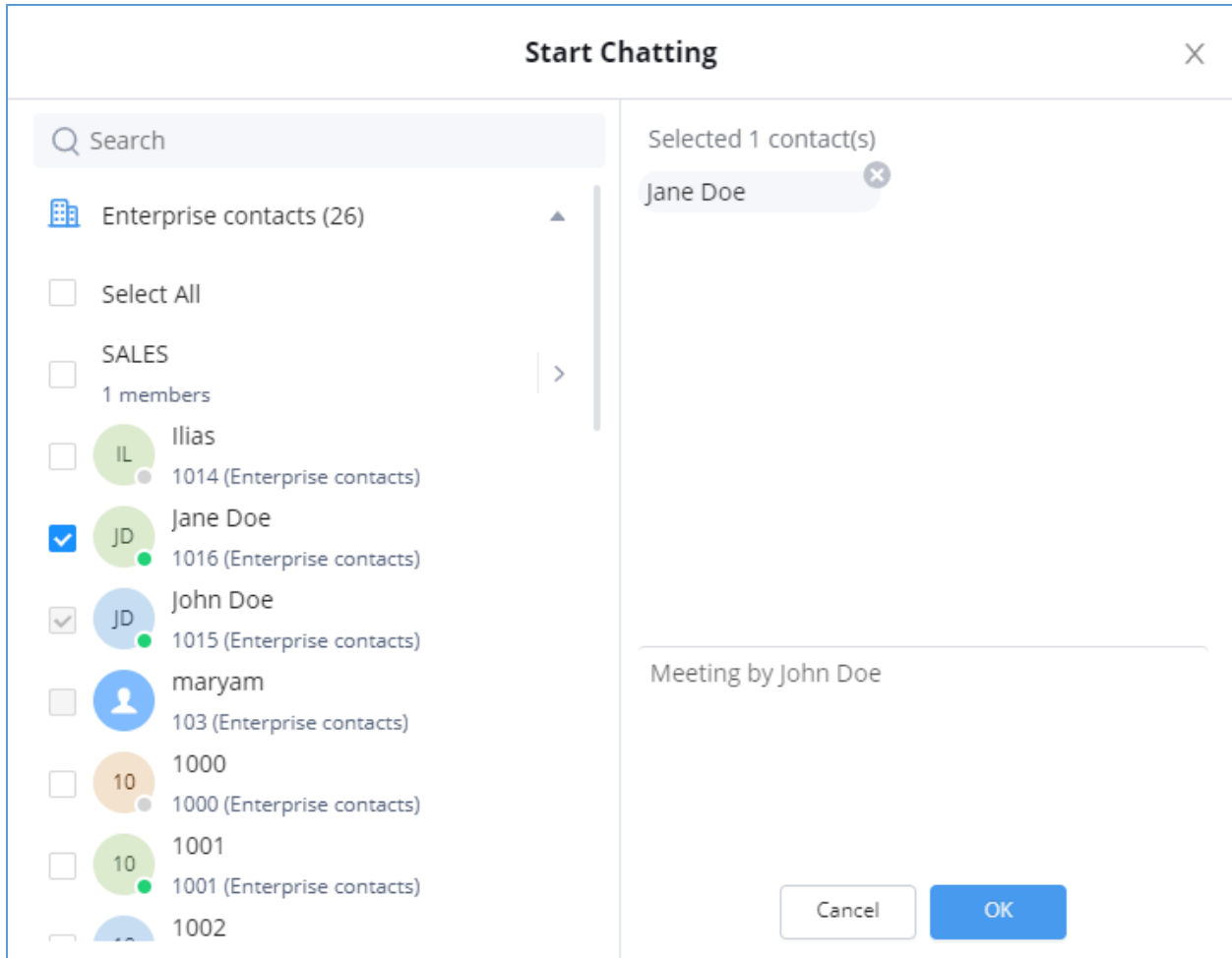


**Figure 72: Create a Group Chat After The Meeting Has Ended**

**Important Note:** Please note that only the host of the meeting can create the group chat and forward the chat history.

Once that's clicked, a window will appear with the members of the meeting selected, with the possibility to add any users that were not in the meeting:

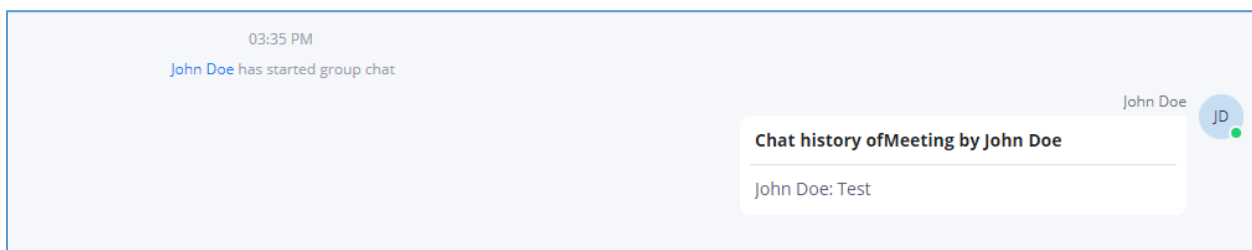




**Figure 73: Choose The Participants**

Press “OK” to create the group and forward the chat history of the meeting.

The group will be created, and the chat history will be displayed similar to the image below.



**Figure 74: Example of Forwarded Meeting Chat History**



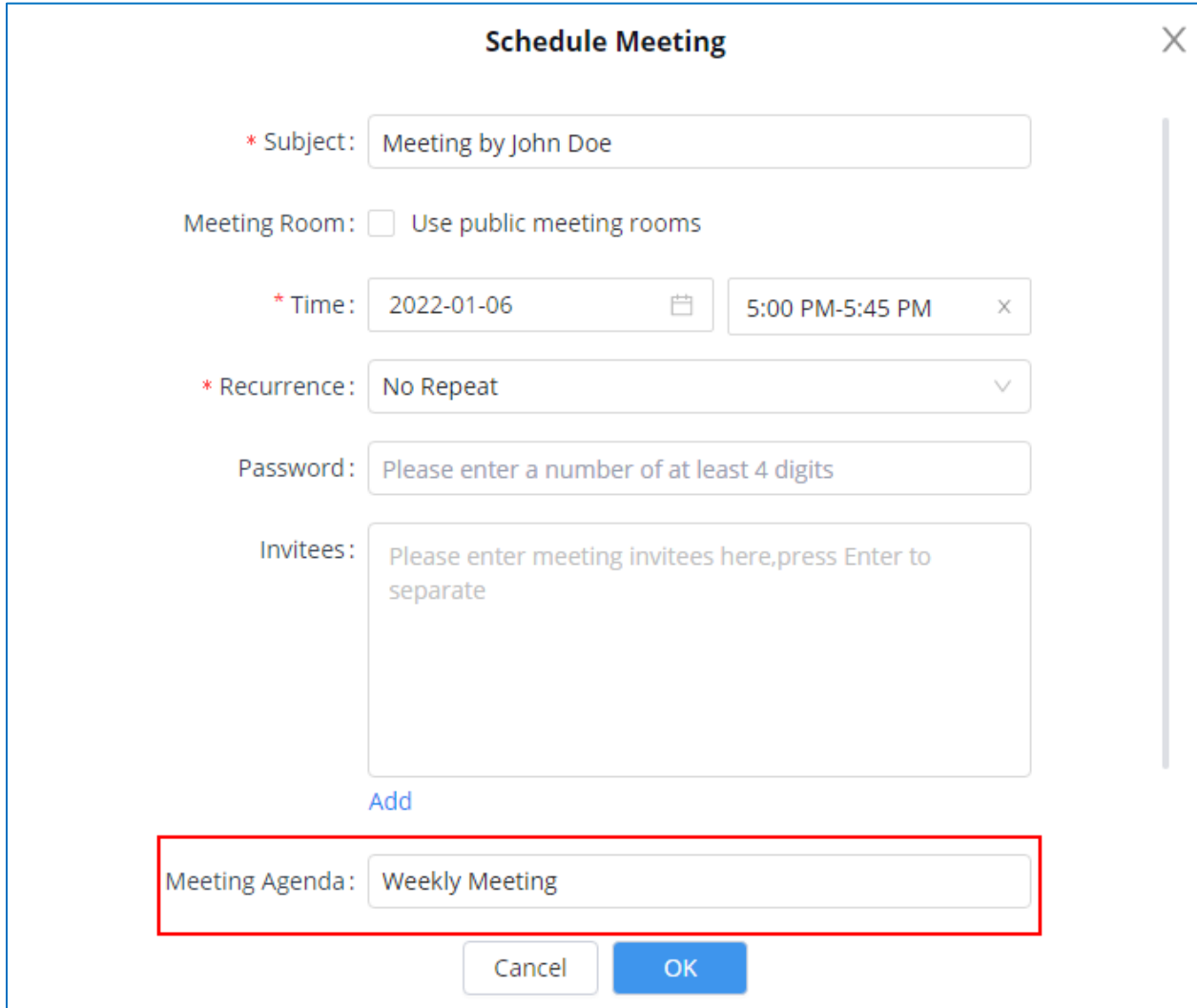
## MEETING MANAGEMENT

### Schedule Meeting

Wave web users can schedule meetings after logging in with the SIP extension number and SIP registration password. Click on Meetings on the left panel and select “Schedule Meeting” on the top. A new window to edit schedule meetings will be prompted.

### Meeting Agenda

When scheduling a meeting, the host can configure an agenda name to the meeting to be reminded of that purpose of that meeting.



**Schedule Meeting** X

\* Subject: Meeting by John Doe

Meeting Room:  Use public meeting rooms

\* Time: 2022-01-06 5:00 PM-5:45 PM X

\* Recurrence: No Repeat v

Password: Please enter a number of at least 4 digits

Invitees: Please enter meeting invitees here,press Enter to separate

Add

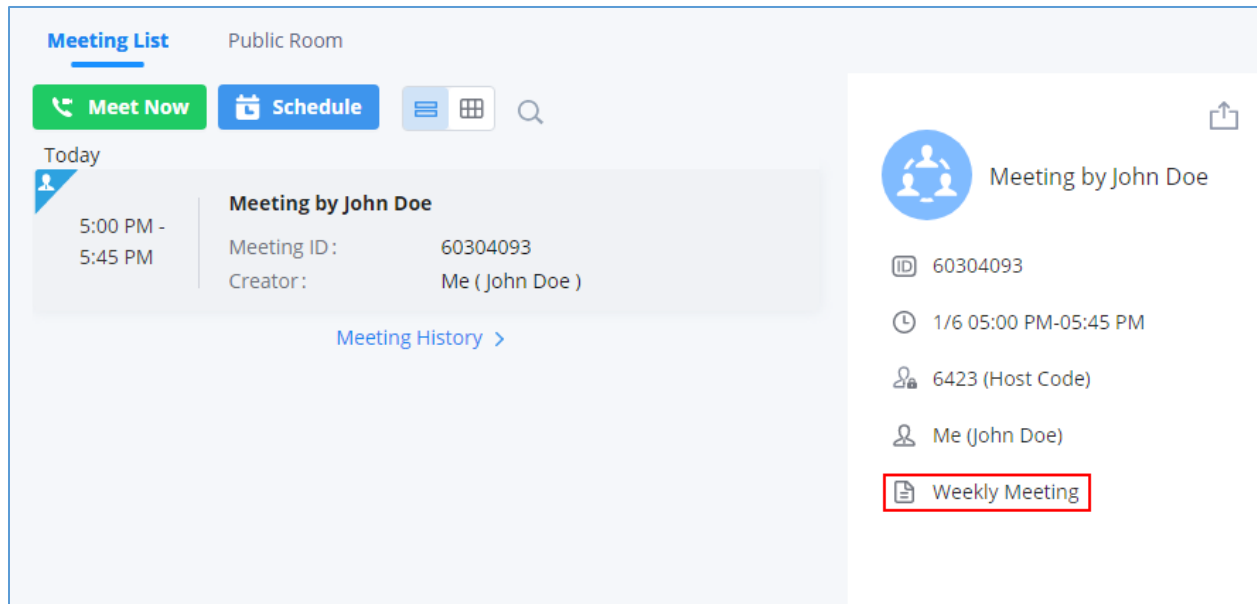
Meeting Agenda: Weekly Meeting

Cancel OK

Figure 75: Schedule Meeting Parameters

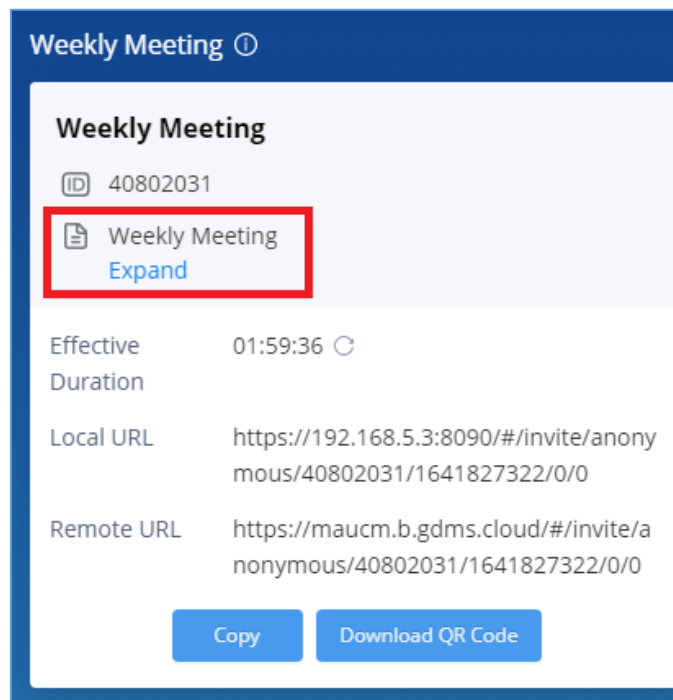


After creating the meeting, you can check the agenda in the meeting details. Please check the screenshot below:



**Figure 76: Meeting Details**

When the meeting starts, the user can click to view the meeting details to check the meeting agenda. Please see the screenshot below:



**Figure 77: Meeting Agenda**





Schedule Meeting ✕

\* Subject:

Meeting Room:  Use public meeting rooms

\* Time:

\* Recurrence:  ▼

Password:

Invitees: 

Please enter meeting invitees here,press Enter to separate

Add

Meeting Agenda:

**Host Settings** ▼

**Advanced Settings** ▼

**Figure 78: Schedule Meeting**

**Table 3: Schedule Meeting Specifications**

Schedule Meeting Options	
<b>Subject</b>	Configure meeting subject.
<b>Conference Type</b>	Select video or audio conference.

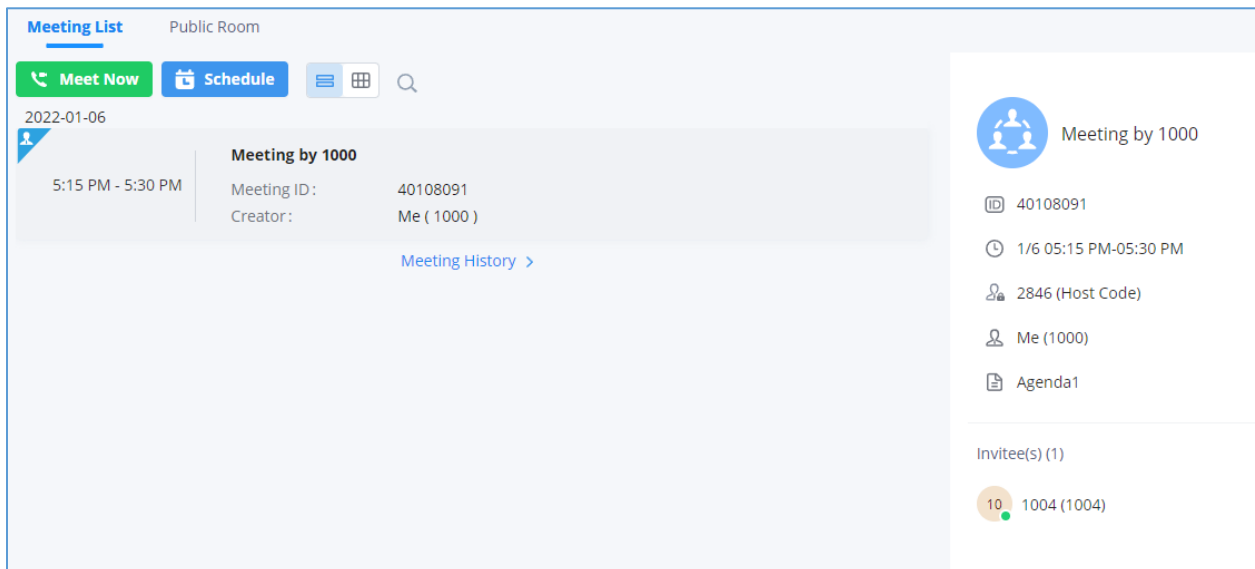


<b>Meeting Room</b>	<p>The user can select to use a public meeting room.</p> <p><b>Disable:</b> The meeting will use a random meeting number.</p> <p><b>Enable:</b> The meeting will use the public meeting room number. The meeting number will be selected from the existing audio/video meeting room.</p>
<b>Time</b>	<p>Select the date and time for the meeting.</p> <p><b>Note:</b> Please avoid time conflict on schedules in the same meeting room.</p>
<b>Recurrence</b>	<p>Choose when to repeat a scheduled meeting:</p> <ul style="list-style-type: none"> <li>• No repeat</li> <li>• Every Day</li> <li>• Weekly</li> </ul> <p>Monthly</p>
<b>Password</b>	<p>Configure the password for participants to join a meeting. The password must be at least 4 digits.</p>
<b>Invitees</b>	<p>Defines the extensions or emails of the members to attend a scheduled conference. After adding one invitee, click on ENTER to confirm.</p> <p><b>Note:</b></p> <p>-If the invitee's extension does not have email configured on the UCM extension setting, the user can click on "(Add Email)" to add email for this invitee.</p> <p>-To remove an invitee, click on "x" for the invitee.</p> <p>The user can click the "Add" button to add the participants from contacts or groups.</p>
<b>Meeting Agenda</b>	<p>Set the agend of the scheduled meeting. (Up to 500 characters)</p>
<b>Host Settings</b>	
<b>Host</b>	<p>This is used to select a meeting host.</p>
<b>Email</b>	<p>This is the host email address.</p>
<b>Host Code</b>	<p>This is used to configure the host code. The password must be at least 4 digits.</p>
<b>Advanced Settings</b>	
<b>Time Zone</b>	<p>Defines the time zone of the scheduled meeting. The default setting is the</p>




	time zone of the current client.
<b>Email Reminder (minutes)</b>	<p>If configured, email reminders will be sent out x minutes before the start of the conference.</p> <p>Note: After editing the time of a single recurrence of a scheduled meeting, a cancellation email will now be sent out followed by a meeting update email.</p>
<b>Allow participants to invite</b>	If enabled, any participant in the meeting can invite other parties.
<b>Auto-call Participants</b>	If enabled, invited participants will be called when the meeting starts.

After the meeting is scheduled, it will be listed on the meetings page. Meeting participants will receive an email notification for the scheduled meeting. At the same time, the system will send the meeting assistant message to the invitees automatically.



**Figure 79: Scheduled Meeting**

 **GRANDSTREAM**  
CONNECTING THE WORLD

**The meeting you are hosting has been successfully updated, please see below for details.**

**test**


Time	2021-01-25 15:15 -- 2021-01-25 15:45
Time Zone	Etc/GMT-1 (GMT+1:00)
Moderator	1000
Moderator Code	1532
Room	6301

[Join Meeting](#)  
(From Inside Corporate Office)

[Join Meeting](#)  
(From Outside Corporate Office)

Please open the link address with [Chrome](#) or [Firefox](#) browser.

---



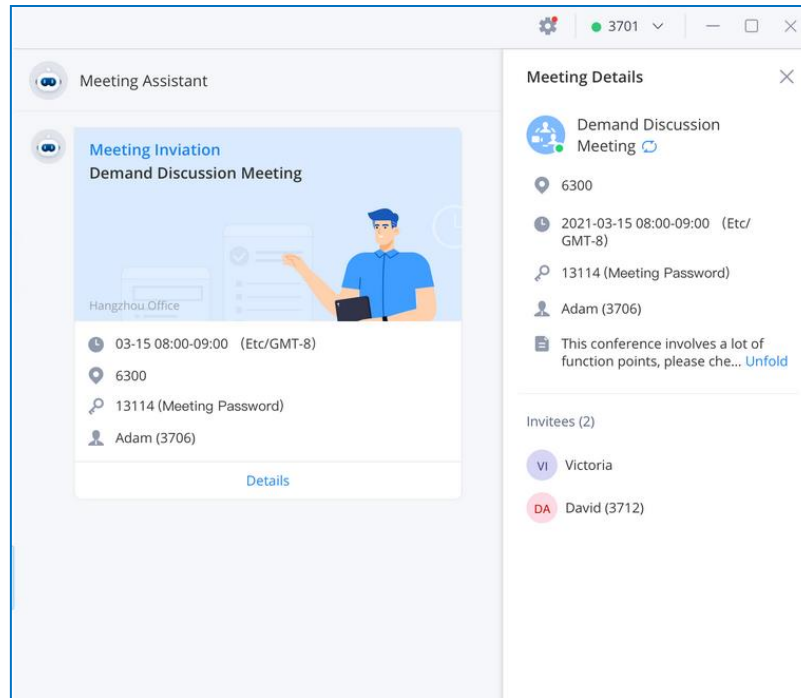
Scan to join the meeting

[Company Info](#) | [Contact Us](#)

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**Figure 80: Scheduled Meeting Email Notification**





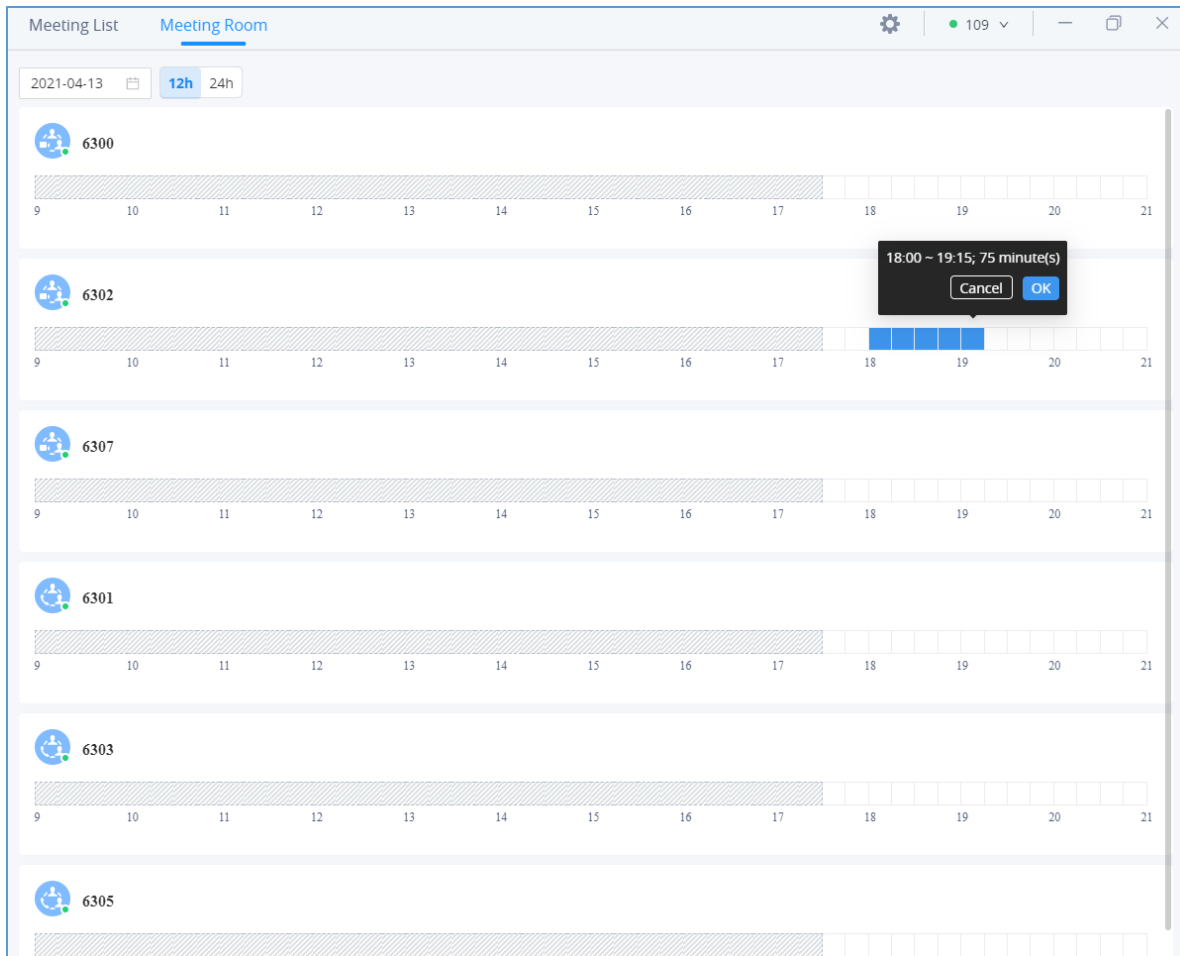
**Figure 81: Meeting Assistant Interface**

If meeting schedule information is modified, participants will receive an email update. An email reminder will also be sent to the participants at the configured email reminder time. If the meeting has been modified, or the meeting reminder will be sent to the participants through the meeting assistant.

To join the meeting, the Wave user can click on the link in the email notification to join the meeting directly, or Wave mobile app user can scan the QR code in the email notification to join the meeting as well. The user can click the meeting assistant message to enter the meeting.

## PUBLIC MEETING ROOM

The user can click the “Meeting” menu on the left side of the Wave application main interface to open the meeting interface. The user can click the “Public Meeting Room” tab on the top of the meeting interface to access the list of the public meeting rooms in the current UCM. Please see the figure below:



**Figure 82: Public Meeting Room List**

The timeline is displayed under each public meeting room. The blank field represents the vacant period, and the blue field represents the period that has been scheduled. It supports to click to switch the date

2021-04-20, and the user can also switch the time range displayed in the timeline by clicking “12h/24h”.

The user can select a specific meeting room and click the button [Join Meeting](#) to access the public meeting room. If there is a meeting in the current public meeting room, the user will be directed to the



current meeting. If there is no meeting in the current meeting room, the user will join the meeting as a participant.

## Edit/Cancel Meeting

Only the meeting creator can edit/cancel the meeting.

**Step 1.** The user can click the “Meeting” button on the left side of the main interface to access the meeting list interface.

**Step 2.** Find the “Not started” meeting in the calendar.

**Step 3.** Move the cursor to the meeting and click “Edit Meeting” or “Cancel Meeting.”

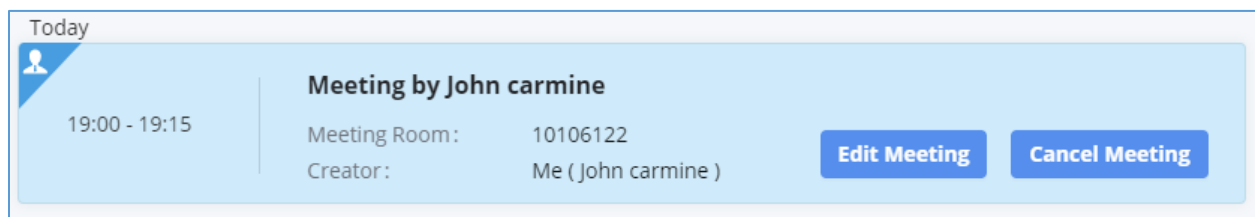


Figure 83: Edit/Cancel Meeting

**Step 4.** After editing/canceling the meeting, the user can click the “OK” button to apply the changes, and the meeting modification notification will be sent to the invitees immediately.

**Note:** If the user edits any information of the meeting, including invitees, meeting property, if the user selects the email notification option, the system will send the emails to all invitees automatically.

## Reschedule Meeting

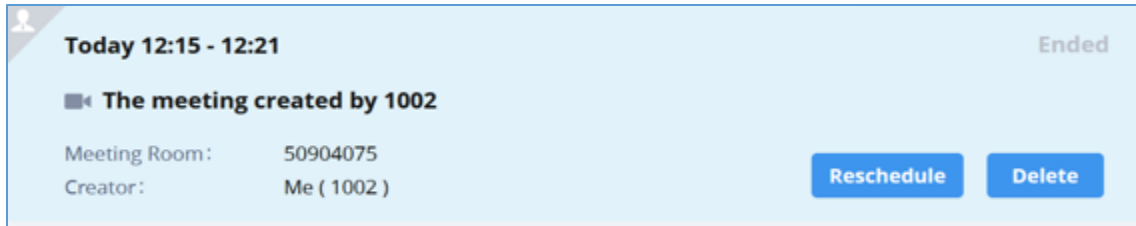
For the “Ended” meetings, the user can reschedule the meetings from the Wave application.

**Step 1.** The user can click the “Meeting” button on the left side of the main interface to access the meeting list interface.

**Step 2.** Find the “Ended” meeting in the calendar.

**Step 3.** Move the cursor to the meeting and click the “Reschedule” button or click the “Reschedule” button on the meeting details interface.






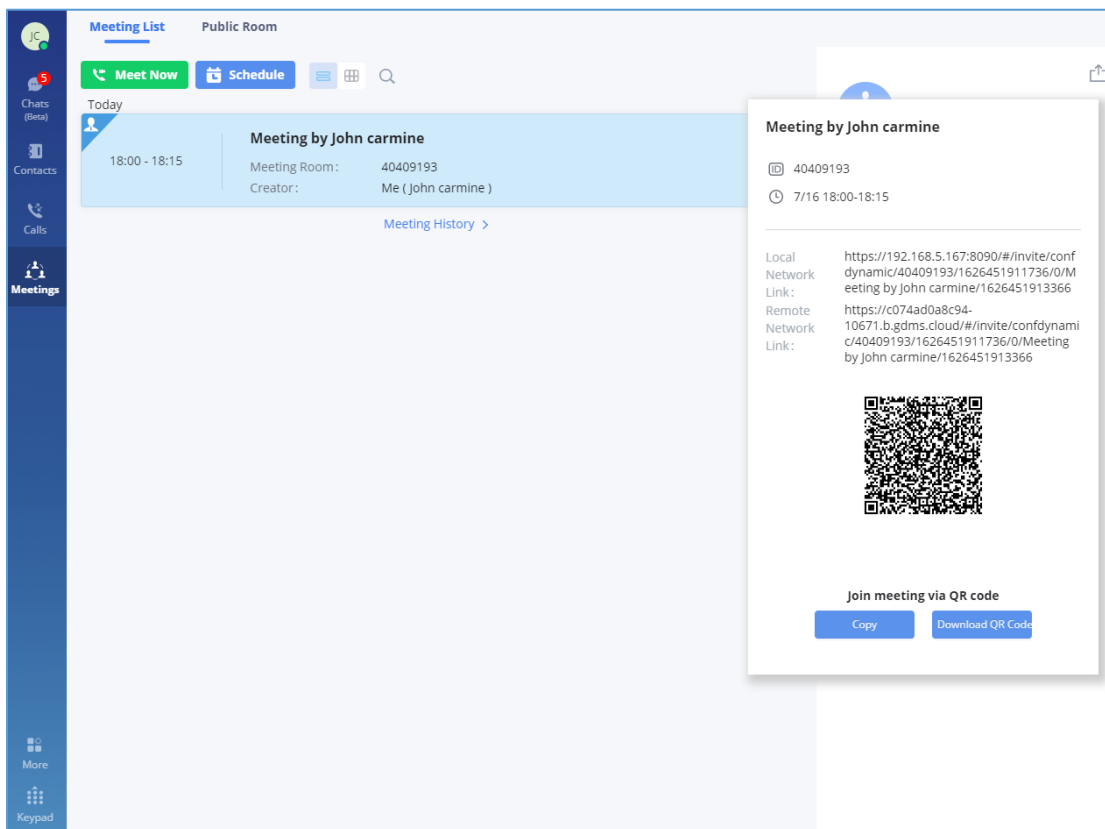
**Figure 84: Rescheduling Meeting**

**Step 4.** The user will be directed to the meeting rescheduling interface, and the current meeting subject, invitees, meeting property information will be filled in the corresponding fields automatically.

**Step 5.** The user can click the “Schedule Meeting” button to reschedule the meeting as a new meeting.

## Share Meeting

In the meeting details interface, the user can click the share button  on the right upper corner to copy the meeting information, or the user can download the meeting QR code, and send the meeting information to the contacts through chat, email, etc.



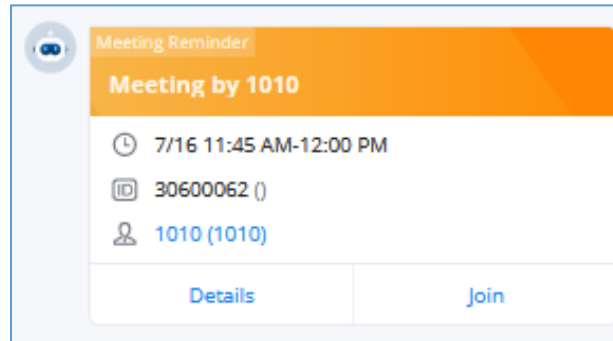
**Figure 85: Share Meeting**





## JOIN MEETING

**Method 1:** In the chat interface in the Wave application, the user can click “**Meeting Assistant**” to find the meeting notification which will be sent to the invitees 10 minutes before the meeting starting time, and click the “**Join**” button to join the meeting.



**Figure 86: Join via Meeting Notification**

**Method 2:** In the meeting list in the Wave application, the user can find the meeting which has invited the user and click “Join” to join the meeting.

**Method 3:** In the “Public Meeting Room” list of the meeting interface in the Wave application, the user can click to join the public meeting room directly.

**Method 4:** The user can enter the meeting number to join the meeting directly through the dial panel.

**Method 5:** The user can join the meeting by clicking the “Join” button in the meeting invitation email.


### Join Meeting via Link

If users do not have a UCM extension to log in to Wave web, the users can join the meeting via a link. The link can be obtained from the meeting invitation email or from the meeting organizer/participant who shares the link directly.

After the users join the meeting via the link, the users can change the display name after opening the participant list and selecting the current name.



## END MEETING

On the meeting list, the meeting creator can click  button to end the meeting which is currently in progress. Then, the meeting will be ended directly.

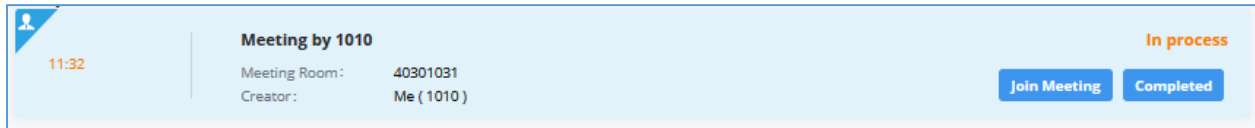


Figure 87: End Meeting



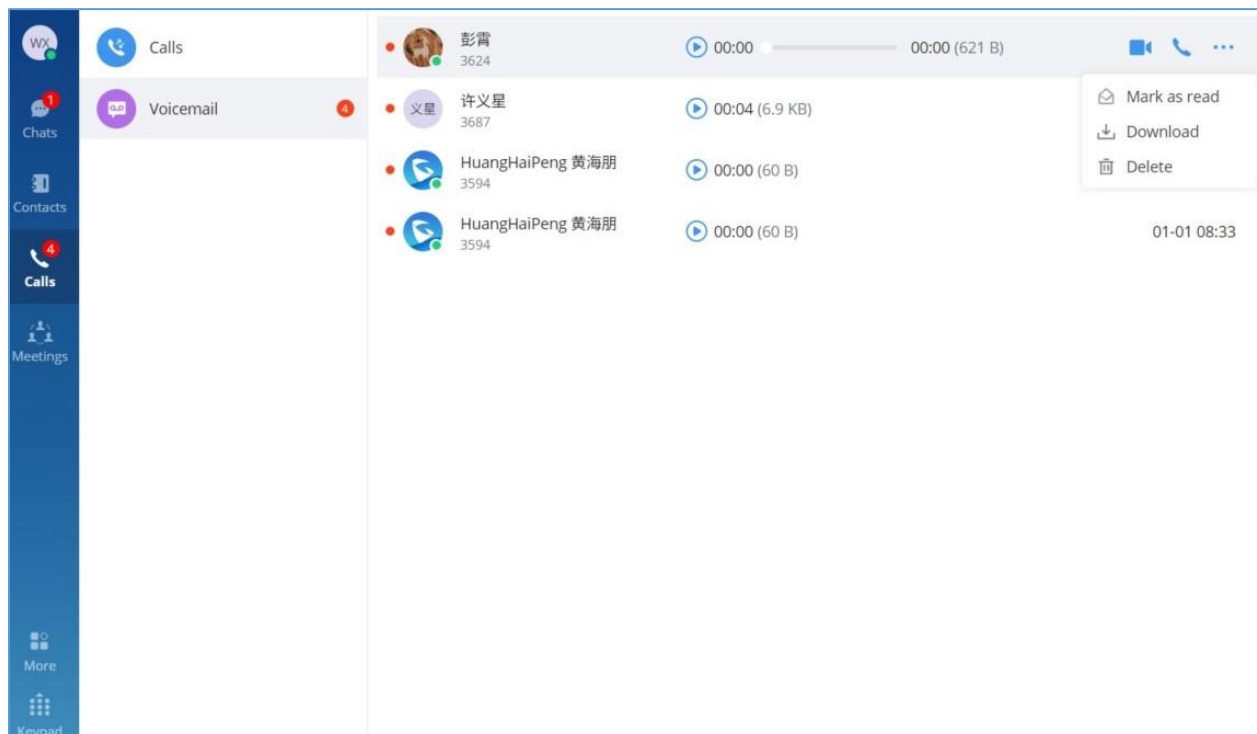
## VOICEMAIL

Users can click on the “**Call**” menu on the left side of the Wave application UI and click the “**Voicemail**” menu to view all voicemails of the current Wave account.

In the “**Voicemail**” module, users can check all voicemails received by the account, including the common voicemail and urgent voicemail.

Users can play the voicemail, set the voicemail to read, and download/delete the voicemail.

Users can also dial the contacts and send messages to the contacts from this interface. Please refer to the screenshot below for the voicemail interface:

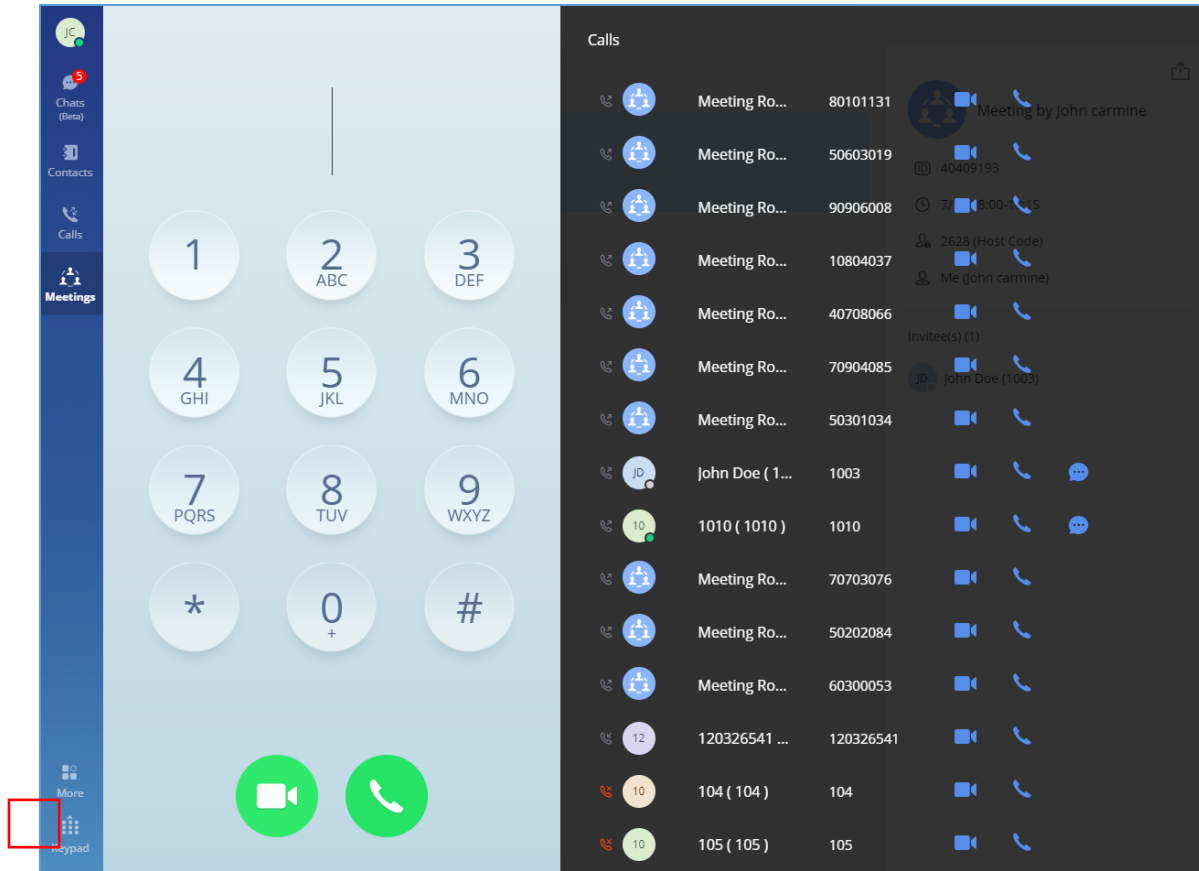


**Figure 88: Voicemail Interface**

Users can click the “**More**” menu on the left side of the application UI and click on the “**Voicemail**” module to access the user portal interface on the UCM Web UI.

After logging in to Wave web, users can enter the voicemail access code to listen to voicemail.





**Figure 89: Open keypad on Wave Web Page**



1. Open the keypad on Wave web, enter the voicemail access code. For example, \*98 is the default feature code on UCM for users to access the voicemail box.
2. Follow the IVR from UCM to enter the voicemail box and password.
3. If the password is correct, users will be able to hear voicemail options and listen to the voicemail.

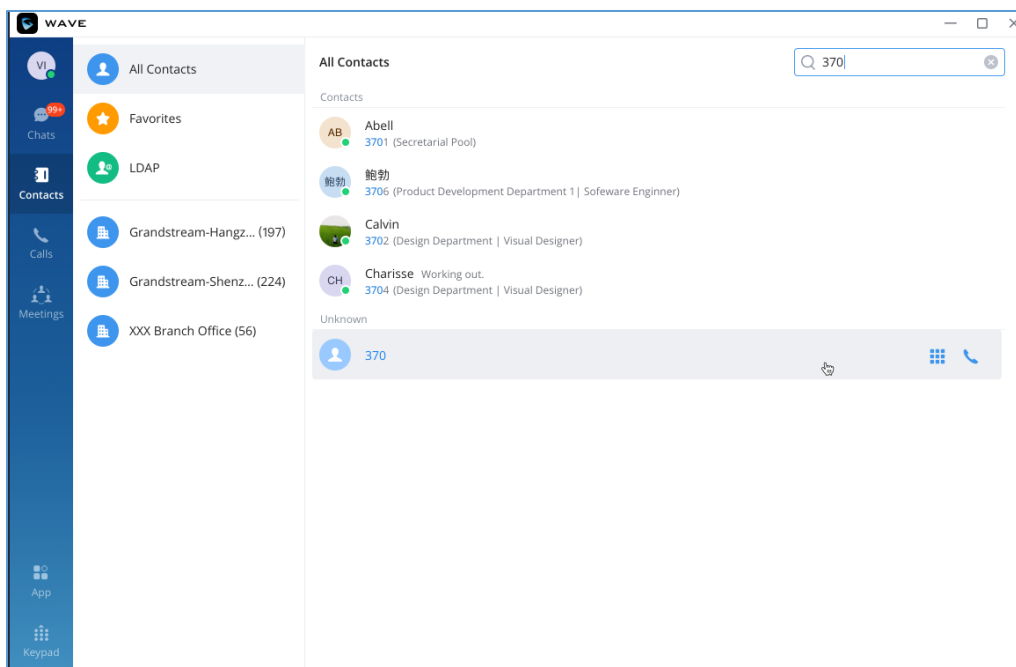
**Note:** The voicemail access code and voicemail password are pre-configured in UCM. Please contact UCM admin to obtain the voicemail access code and password.

## CONTACTS

In Wave web, users can find the company's contacts, view their presence, and call status. Users can also select the contact to view details and call the contact.

### Search Contacts

Users can enter a username or number to search contacts. On the search result, users can click to view contact details, click on  to initiate a video call, or click on  to initiate an audio call.



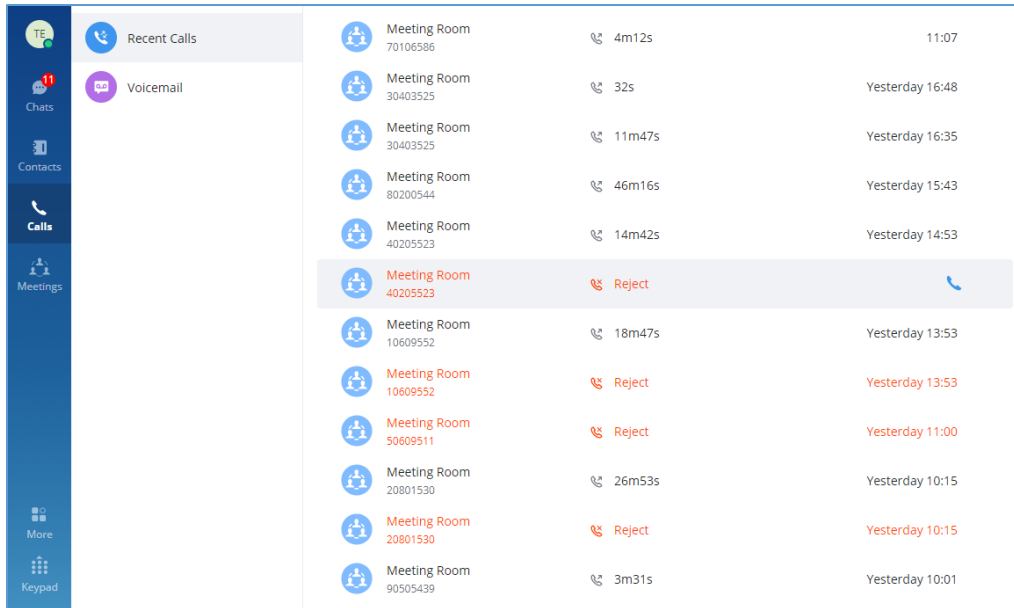
**Figure 90: Contacts**

**Note:** The contacts displayed in the Grandstream Wave web portal contain UCM extensions (based on contact privilege settings), meeting room extensions, and LDAP contacts (based on the UCM's LDAP phonebook settings). (Refer to the UCM630x/A User Manual for more details)



## CALL HISTORY






Click on “Calls” to view the call history for the logged-in account. Users can view call history, search in call history, view details or initiate calls from there.



Contact	Duration	Time
Meeting Room 70106586	4m12s	11:07
Meeting Room 30403525	32s	Yesterday 16:48
Meeting Room 30403525	11m47s	Yesterday 16:35
Meeting Room 80200544	46m16s	Yesterday 15:43
Meeting Room 40205523	14m42s	Yesterday 14:53
Meeting Room 40205523	Reject	
Meeting Room 10609552	18m47s	Yesterday 13:53
Meeting Room 10609552	Reject	Yesterday 13:53
Meeting Room 50609511	Reject	Yesterday 11:00
Meeting Room 20801530	26m53s	Yesterday 10:15
Meeting Room 20801530	Reject	Yesterday 10:15
Meeting Room 90505439	3m31s	Yesterday 10:01

**Figure 91: Recent Calls**

Call history can have the following type of calls:

-  : Incoming audio calls
-  : Outgoing audio calls
-  : Missed audio/video calls and rejected calls
-  : Incoming video calls
-  : Outgoing video calls



## SETTINGS

The Settings menu is on the left side of the Wave application main UI. Users can click the user icon to open the Settings menu, the menu includes Account Information, Account Settings, Call Settings, Audio/Video Device, Language, Export logs option, About, Download mobile client, and Log out option.

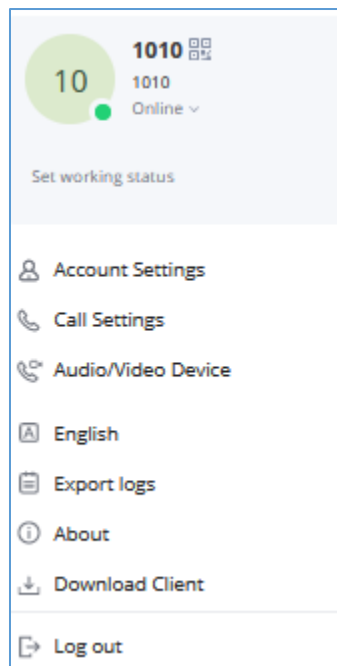


Figure 92: Settings Menu

## Account Information

Account information screenshot is shown as follows:

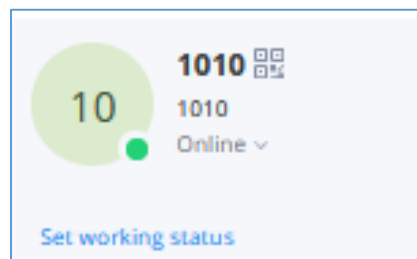


Figure 93: Account Information

- The Account Information interface displays the username, QR code, SIP number, and personal status.
- Users can scan the SIP account QR code with the Wave mobile version to quickly log in to the account.



- Users can set the personal status, which can be divided into account status and working status, and the status will be displayed in the contacts book and chat module.

## Account Settings

Users can enter the Settings menu and click “**Account Settings**” to access the account settings interface in the UCM Web UI, as the screenshot shows below:

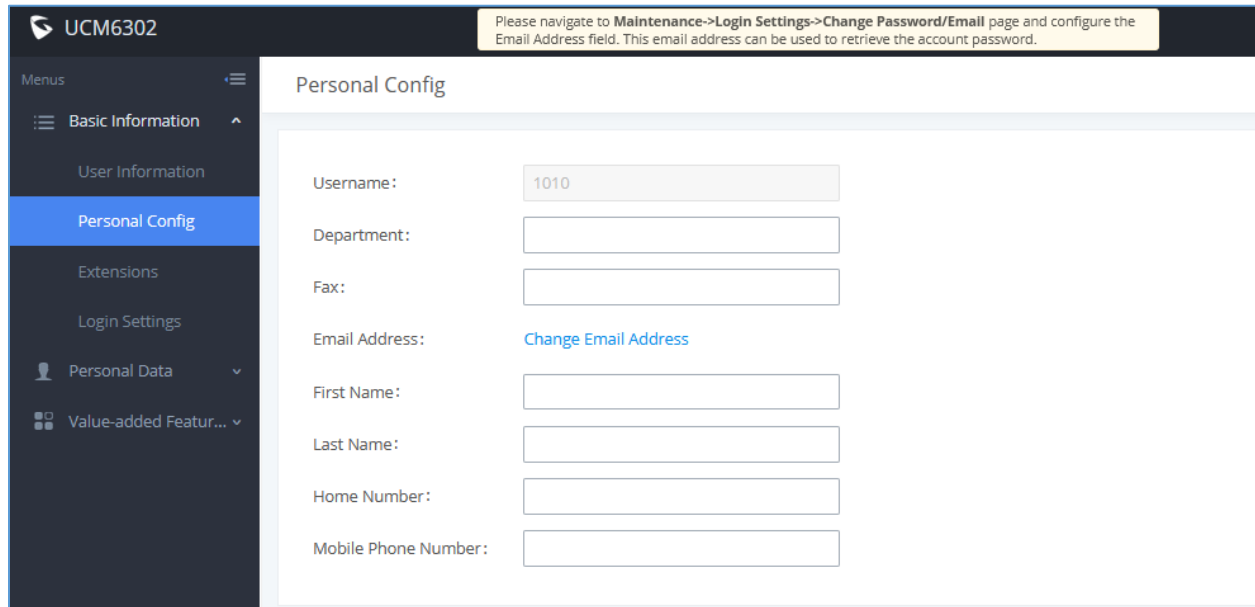


Figure 94: Account Settings

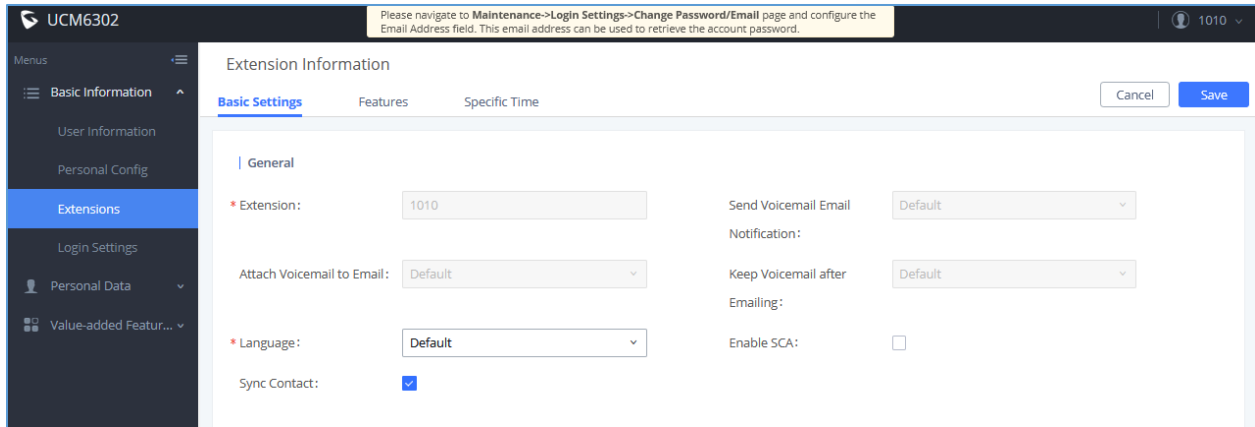
Users can click the “**Account Settings**” option and users will be directed to the account settings interface in the UCM management platform, and users can go to the “**Personal Configuration**” tab to fill in the personal basic information. Then, the updated information will be saved and applied to the Wave application.

## Call Settings

Users can enter the Settings menu and click “**Call Settings**” to access the call settings interface in the UCM Web UI, as the screenshot shows below:







**Figure 95: Call Settings**

Users can click the **“Call Settings”** option and users will be directed to the call settings interface in the UCM management platform, and users can go to the **“Extension”** tab to set the SIP accounts settings. Then, the updated information will be saved and applied to the Wave application.

## Audio/Video Device

The Audio/Video Device menu can be divided into Audio Settings and Video Settings.

### Audio Settings

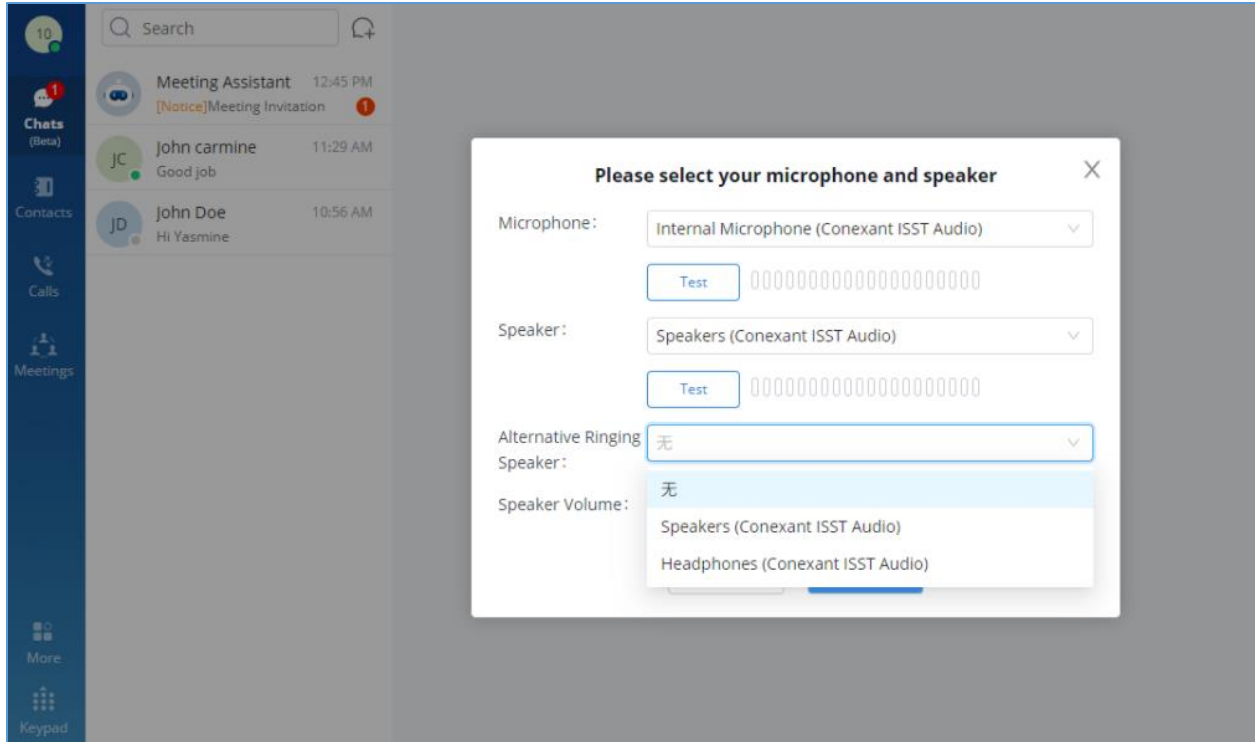
When the device connects to multiple audio devices, the user can select an audio device through audio settings.

For PC client users, the application allows users to select the alternative ringing speaker. When the user receives an incoming call, the preferred and alternative speakers ring at the same time.

**Reference Scenario:** The PC connects to a headphone, but the user does not wear the headphone. The alternative ringing speaker is set, when the user receives an incoming call, the user can hear the ring tone from the PC’s built-in speaker.

**Step 1:** The user can click the user icon to enter the settings menu, move the cursor to the **“Audio/Video Device”** option, and click **“Audio Settings”** to enter the microphone/speaker settings interface, as the figure shows below:





**Figure 96: Alternative Ringing Speaker**

**Step 2:** Go to the “**Alternative Ringing Speaker**” option and click to set the alternative speaker.

**Step 3:** Click the “**OK**” button to apply the changes. The preferred and alternative speakers will ring at the same time when there is an incoming call.

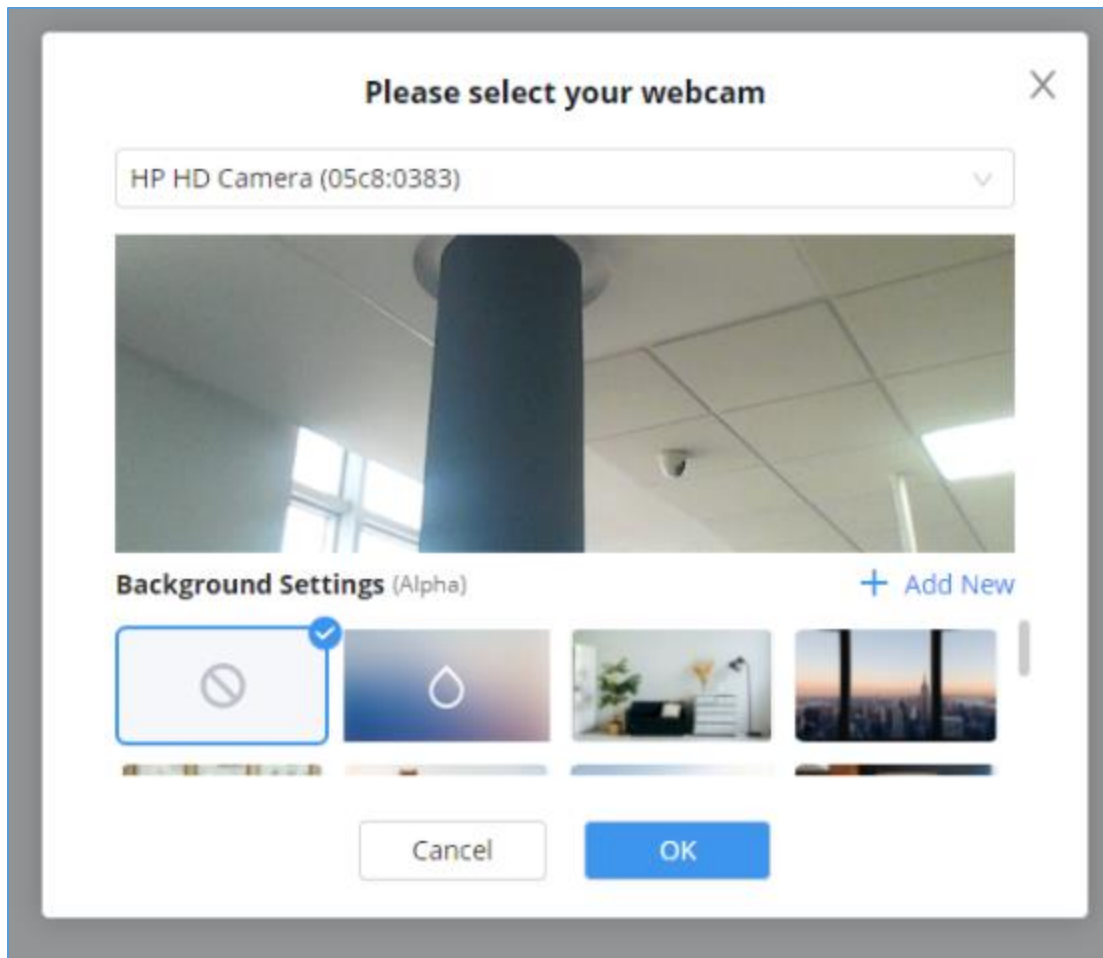
When the user first time logs into Wave application, the system will ask the user to set up an audio device.

**Note:** When the call is established, only the preferred speaker device will be used.

## Video Settings

Video settings screenshot is shown as below:





**Figure 97: Video Settings**

When the PC connects to multiple camera devices, the user can select the video device by “Video Settings.” The user can also set the virtual background in Wave application.

**Step 1:** The user can click the user icon to enter the settings menu, move the cursor to the “**Audio/Video Device**” option, and click “**Video Settings**” to enter the camera settings interface, as the figure shows below.

**Step 2:** The user can select the camera and set the virtual background.

**Step 3:** The user can view the preview result and save/apply the changes. When the virtual background is set, the setting will be saved locally in the application, and the virtual background will be applied for each call/meeting.

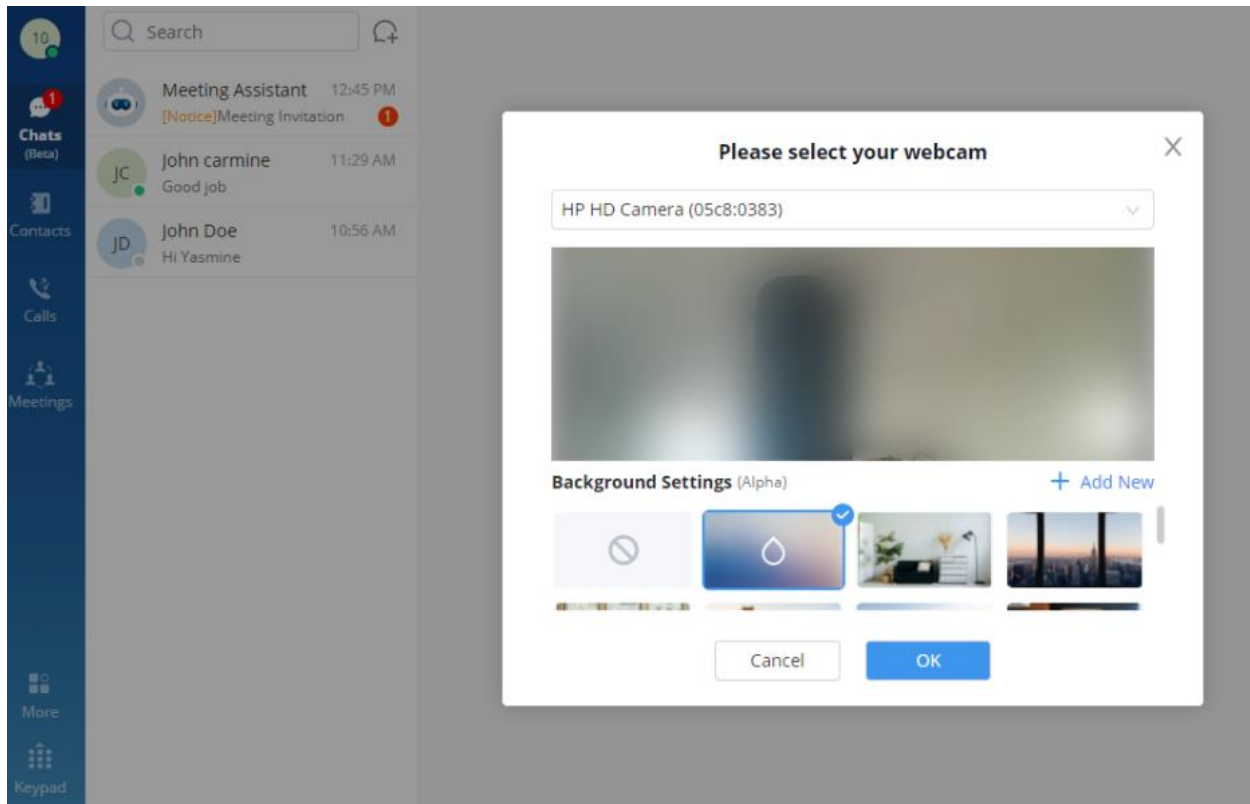
When the user first time logs into Wave application, the system will ask the user to set up a video device.

### **Virtual Background Settings**

In meetings and peer-to-peer calls, the user can set the virtual background in the application locally and the virtual background will replace the background in the camera and send it to the remote client.




**Step 1:** The user can click the user icon to enter the settings menu, move the cursor to the “**Audio/Video Device**” option, and click “**Video Settings**” to enter the camera settings interface, as the figure shows below.



**Figure 98: Virtual Background**

**Step 1:** Users can select the images in the library or customize the uploaded images to create a virtual background.

**Step 2: Customize Uploaded Image:** Click the button  **新增** on the virtual background settings interface to open the local file selection window, and the user can select and customize the image to upload.

**Step 3:** The user can view the preview result and save/apply the changes. When the virtual background is set, the setting will be saved locally in the application, and the virtual background will be applied for each call/meeting.

- 
 : Remove background.





- : Fuzzy background.

**Notes:**

1. There is no background image by default. The limit of the size of a custom uploaded image is 20MB, and the upper limit of the image amount is 10 images.
2. Users can upload images multiple times. Each uploaded image will generate a new background, the length and width of the image are adaptive 16:9 and the image will be saved locally.
3. The suggested fuzzy background color should be set to avoid being similar to the color of the actual scene and clothes.

## Date/Time Format

The Wave application allows to change the date and time format.

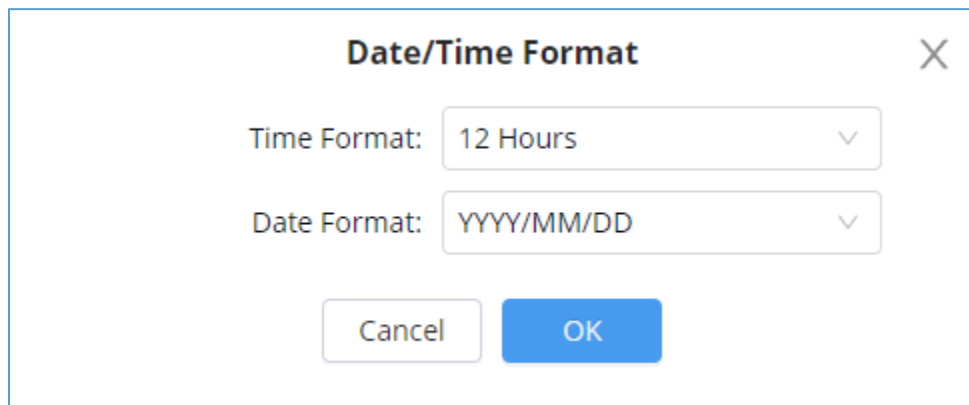


Figure 99: Date/Time Format

## Language

The Wave application supports Chinese, English, French, Spanish, Portuguese, Vietnamese and other languages. Users can set up languages by requirements.

**Note:** Users cannot set the language during the call.



## Help and Feedback

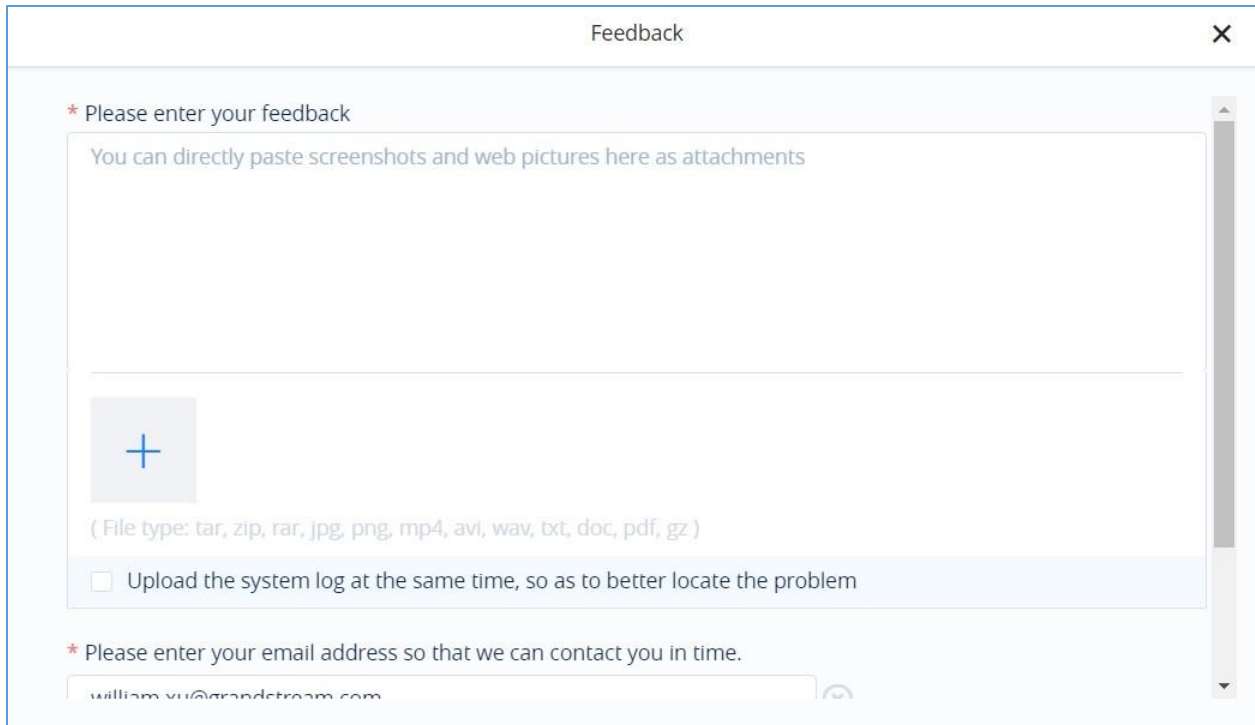
Users can go to the settings menu and click **“Help and Feedback”** to display the help, feedback, and exporting logs menu.

### Help

If the user has any questions while using Wave application, the user can click the **“Help”** option to go to the official website of Grandstream and view the user guide of Wave application.

### Feedback

If the user encounters any problems with Wave application, or the user wants to share any suggestions about Wave application, the user can click the **“Feedback”** option to connect to the Grandstream Feedback System. It allows users to share feedback and we can collect questions/suggestions from users so that we can provide better user experiences for users.



The screenshot shows a web-based feedback form titled "Feedback" with a close button (X) in the top right corner. The form contains the following elements:

- A red asterisk followed by the text: "\* Please enter your feedback".
- A large text area with a light blue border and a vertical scrollbar on the right. Inside the text area, there is a placeholder text: "You can directly paste screenshots and web pictures here as attachments".
- A square button with a blue plus sign (+) for file uploads.
- Below the button, the text: "( File type: tar, zip, rar, jpg, png, mp4, avi, wav, txt, doc, pdf, gz )".
- A checkbox with the label: "Upload the system log at the same time, so as to better locate the problem".
- A red asterisk followed by the text: "\* Please enter your email address so that we can contact you in time.".
- An email input field containing the text: "william.yu@grandstream.com".
- A small circular icon to the right of the email input field.

Figure 100: Feedback Interface

### Export Logs

If the user has any problems with Wave application, the user can export the logs and save the logs locally on the PC for troubleshooting purposes. The exporting logs function can help users to address the problems and offer users better user experiences.



## About

Users can go to the settings interface and click “**About**” to get more details about the Wave application.

- Display the current version of the Wave application.
- If there is an updated application version, the user can click “**Update Version**” to upgrade the application.
- The user can click on “**Privacy Terms**” to view the privacy terms of Wave application.
- The user can click on “**Help**” to direct to Grandstream Official website to view the Wave application user manual.

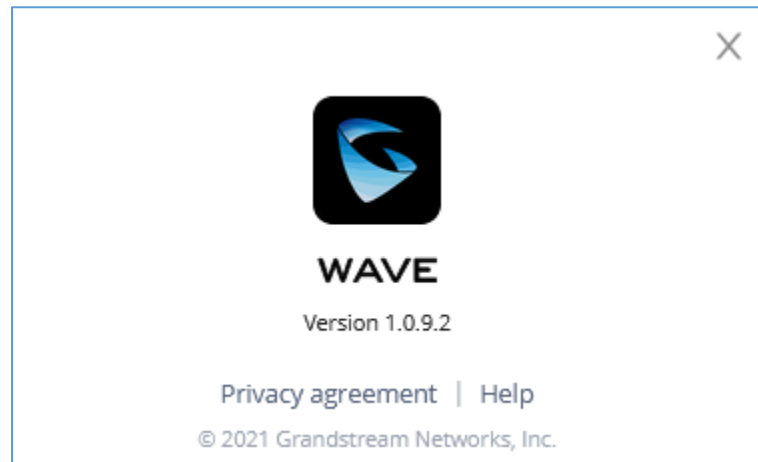


Figure 101: About

## Download Mobile Client

- Users can download Wave application from Grandstream Official website. When the application has been downloaded to the local PC, the user can follow the instructions to install the application.

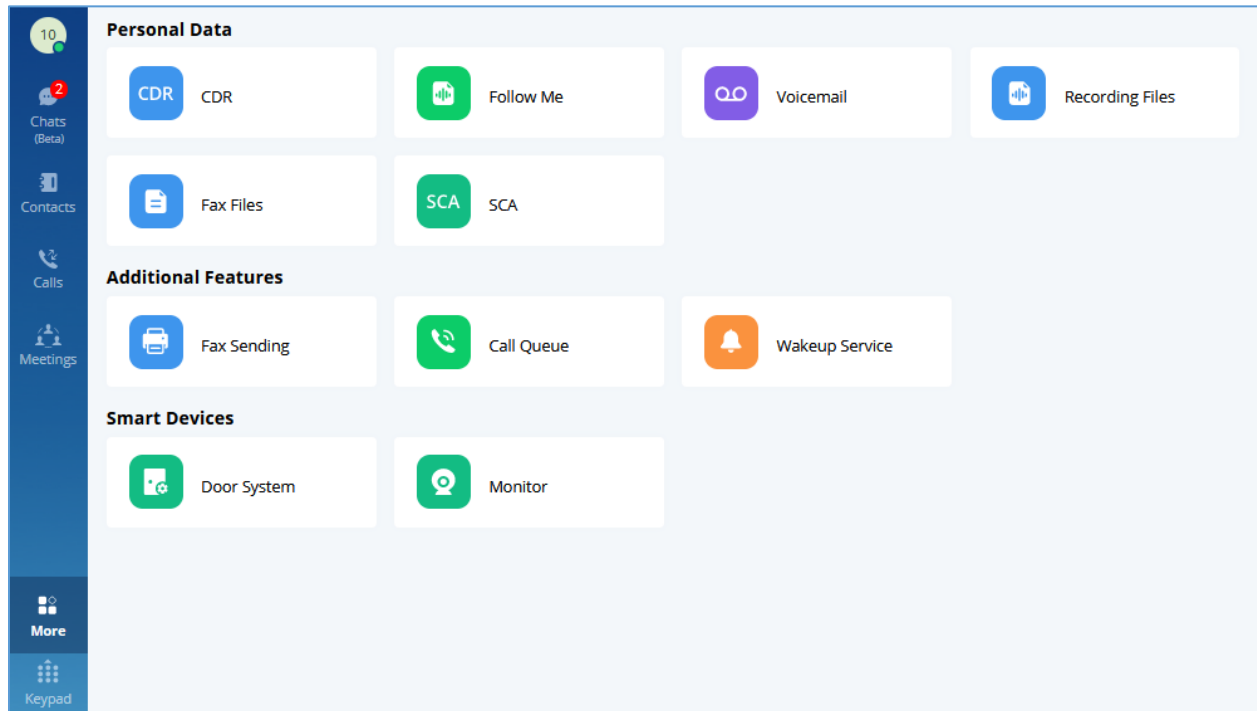
## Log out

- Users can click “**Log out**” to jump to the login interface and log in again.



## MORE APPLICATIONS

More applications interface screenshot is shown below:



**Figure 102: More Applications**

Users can click the “More” button on the left menu on the main application UI to view more applications. It includes personal services, value-added services, and smart devices. Users can also set door systems and monitors according to the requirements.

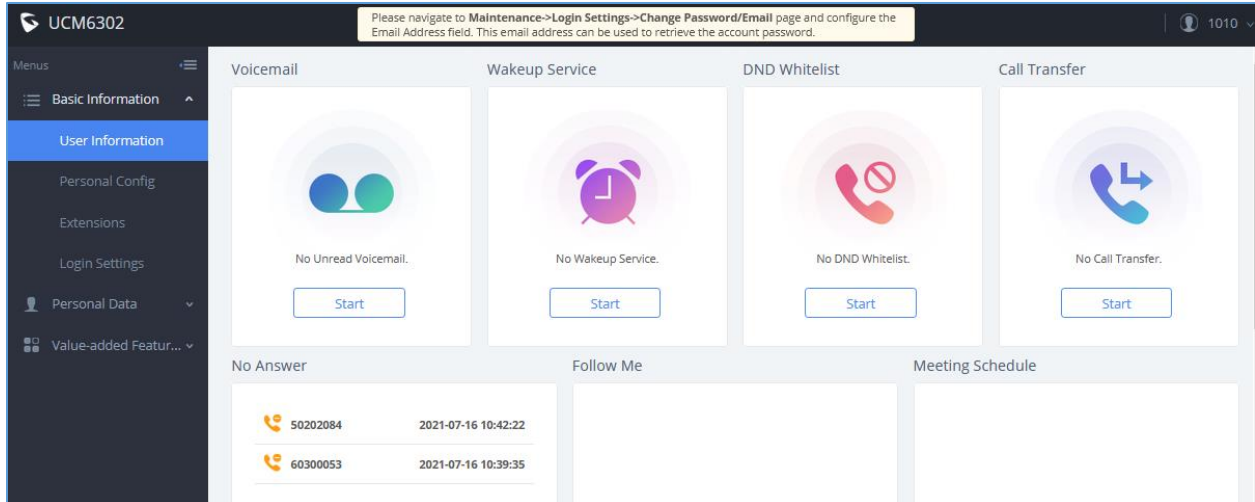
## Services

The services include personal services and value-added services.

The Wave application integrates UCM's User Portal functionality. Users can directly enter the User Portal interface through the services entry. Please see the screenshot below:







**Figure 103: User Portal Interface**

Users can set the following personal services and value-added services:

- CDR
- Follow me
- Voicemail
- Recording Files
- Fax Files
- SCA
- Fax Sending
- Call Queue
- Wakeup Service

For more information about the services, please refer to the UCM User Portal Guide on Grandstream's official website.

## Smart Devices

### Door System

Please follow the instructions below to set up the door system:



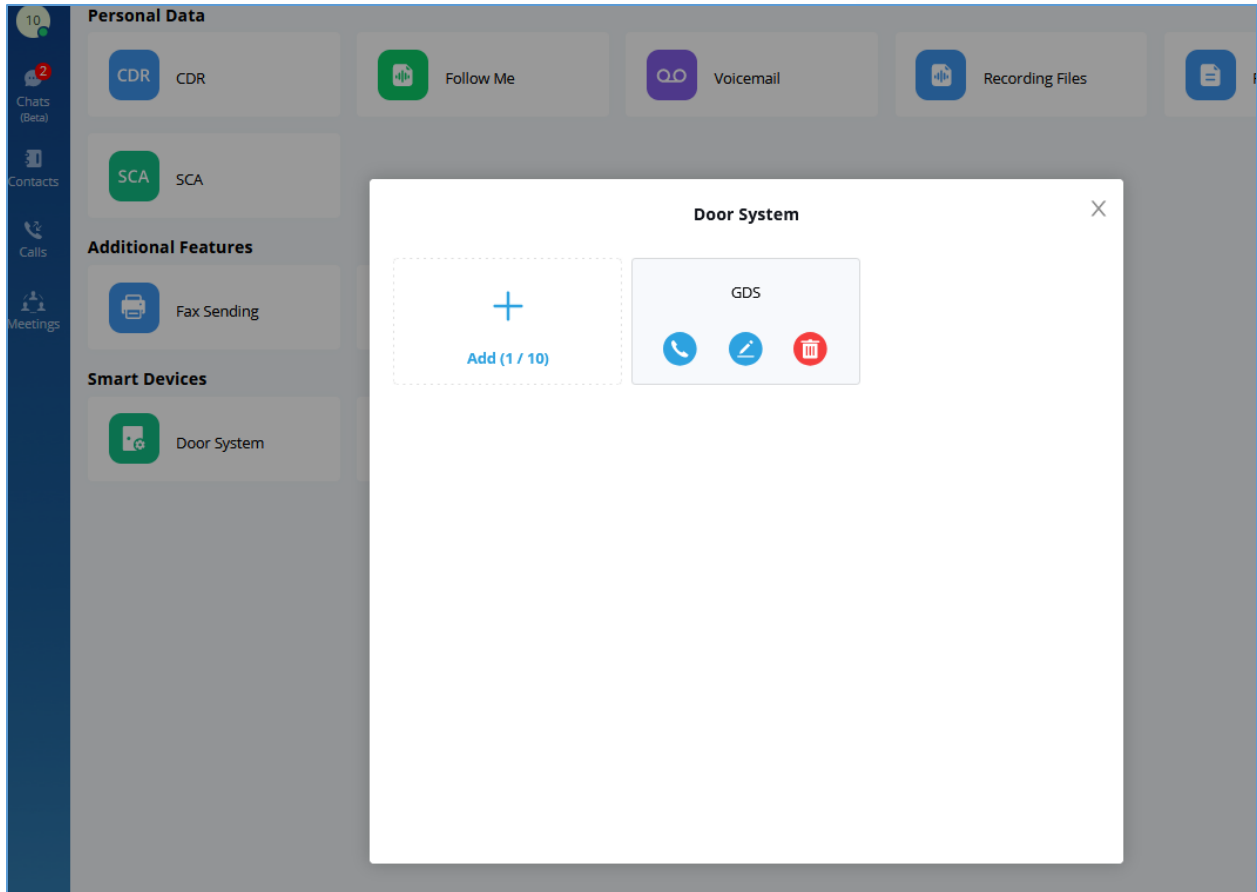


Figure 104: Door System Interface

Users can click the “**Add**” button to set up the relevant parameters for the door system. Please see the screenshot below:

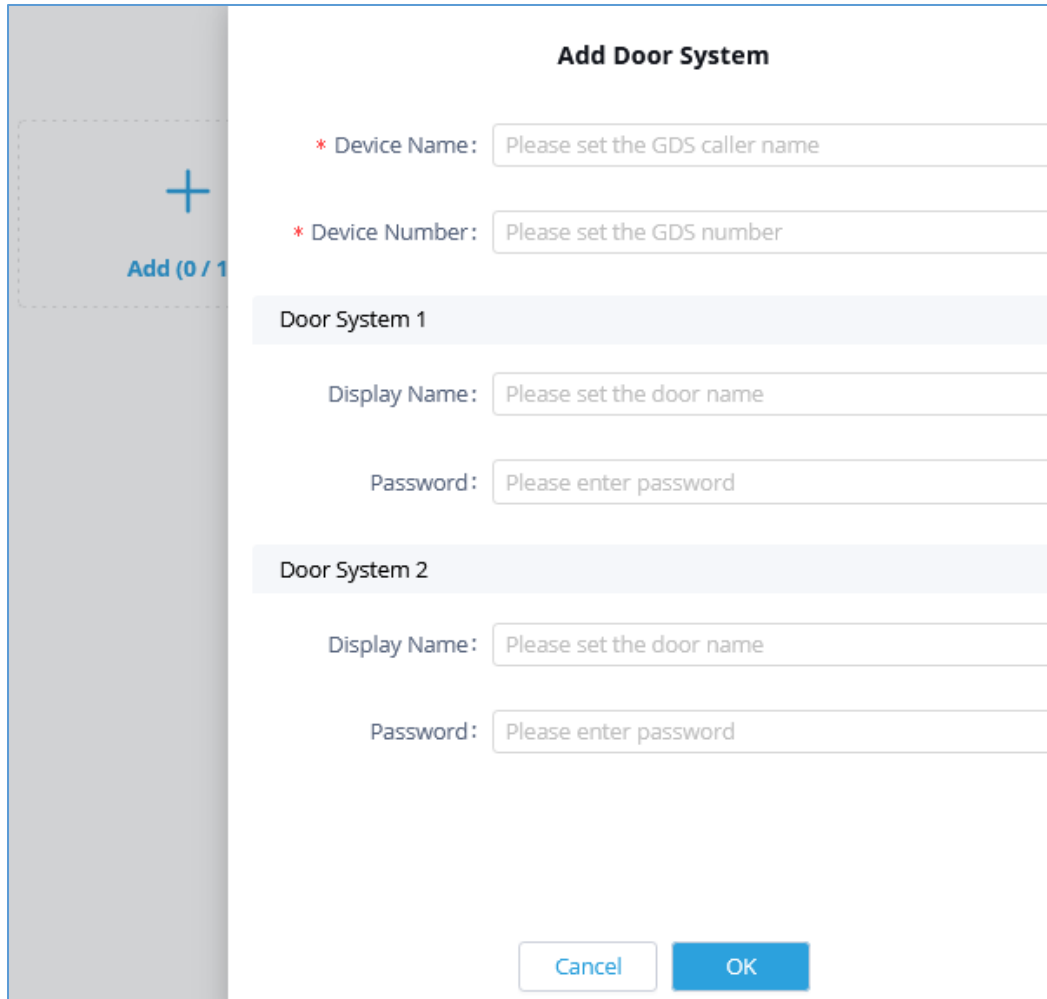


Figure 105: Add Door System

**Notes:**

1. Users need to set the correct password to open the door for the door system.
2. The user needs to go to **GDS Web UI → Door System Settings → Basic Settings → Enables DTMF** option so that the user can see the “Open Door” option once the user receives an incoming call from the GDS device in the Wave application.
3. The specific models of Hikvision door system have been supported in "Door System" in the Wave Desktop: DS-KV8113, DS-KD8003

When the door system is set up, the user can receive an incoming call from the door system once someone rings the doorbell. Please see the screenshot below:

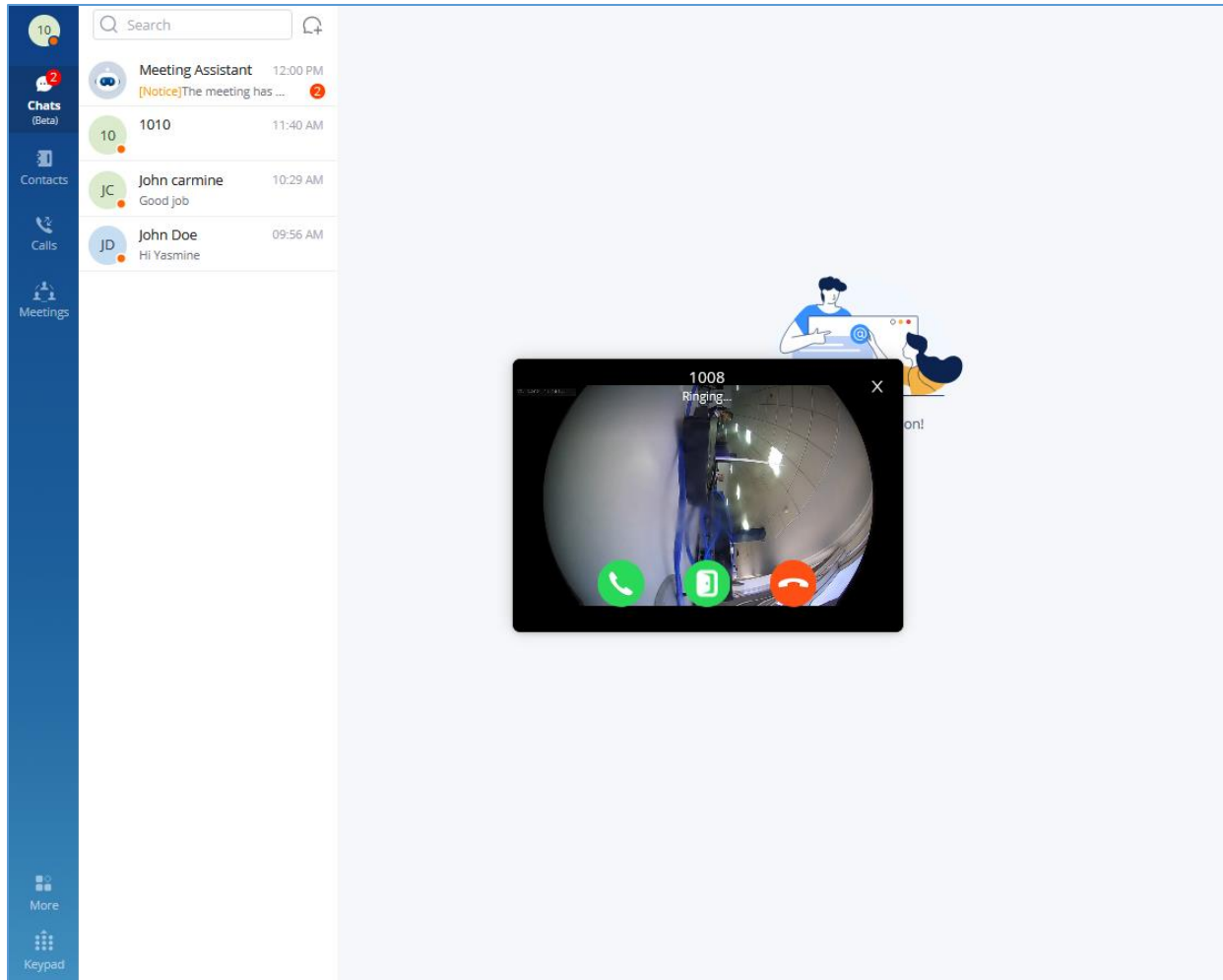



Figure 106: Ringing by Door System

The user can click  button to answer the call, and initiate the video call, as the screenshot shows below:





**Figure 107: Video from Door System**

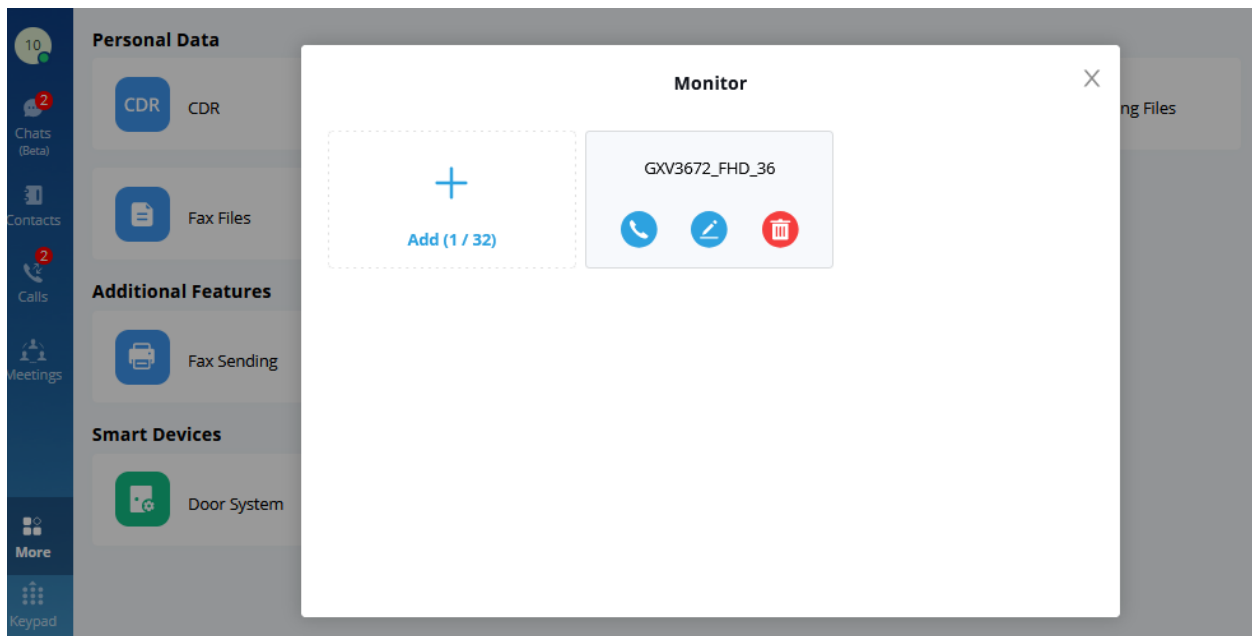
Users can click  button to open the door.

**Note:**

This function is only supported by Grandstream GDS Door System products and Hikvision (DS-KV8113, DS-KD8003) door systems.

**Monitor**

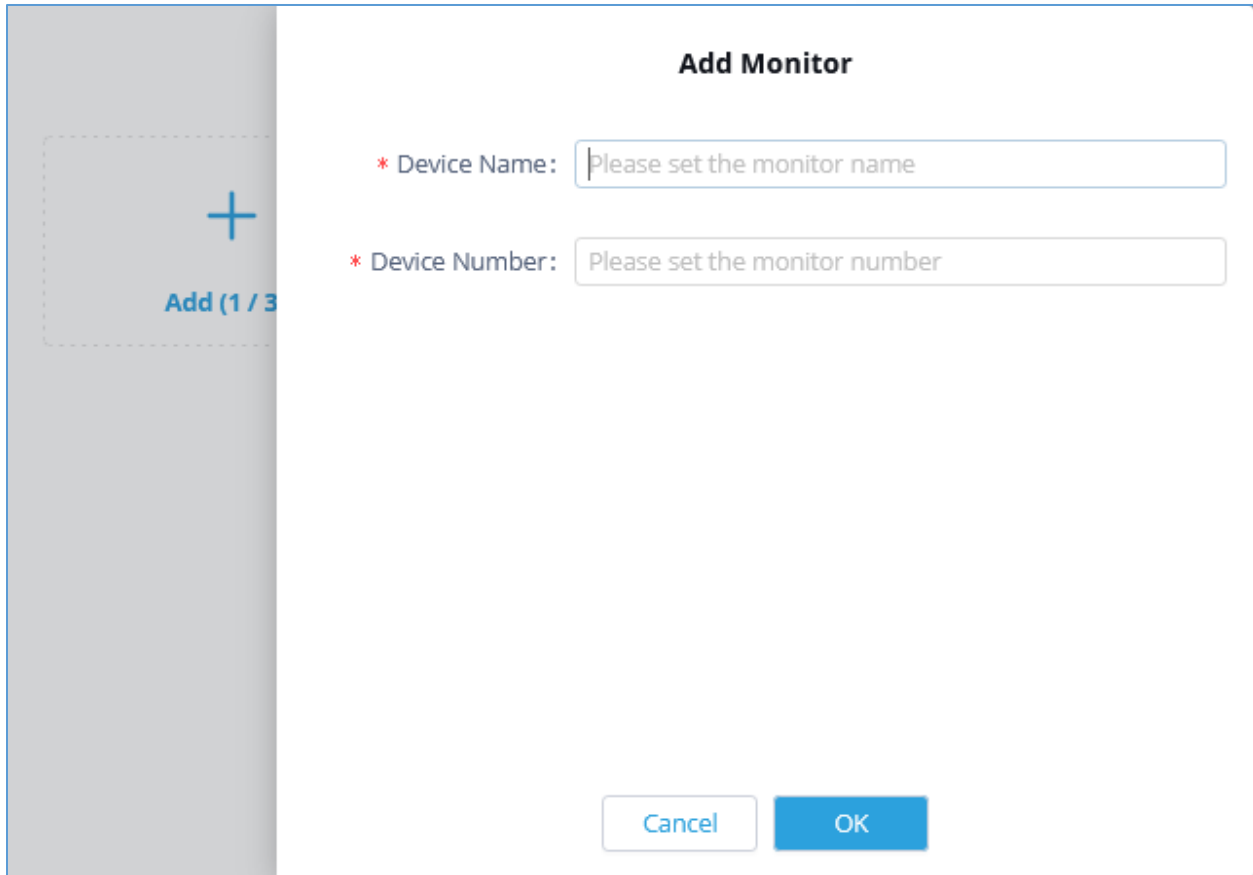
Please follow the instructions below to set up the monitor:



**Figure 108: Monitor Settings Interface**



Click the “**Add**” button to configure Monitor related parameters. As shown below:



**Add Monitor**

\* Device Name:

\* Device Number:

Cancel OK

Figure 109: Add Monitor Interface

When the monitor is added, the user can call a monitor on the Wave application interface to view the corresponding video interface.

**Note:** For Monitor products, SIP account registration is required before adding the devices.

## Operator Panel

Operator Panel in the Wave application is used as call management platform, including Extension module, Call module, Ring Group module, Call Queue module, Parking Lot module, and Voicemail Group module, as the screenshot shows below:

In the Operator Panel, the administrator who has the permission can manage calls from this module. The administrator needs to get permission from UCM Web UI → Call Features → Operator Panel and add the administrator's Wave account in the Operator Panel list before using this function. The administrator can simply click/drag the calls/extensions to manage incoming/outgoing multiple calls in real-time, it greatly improves the call management efficiency for users.

The administrator who has the permission can click the **"More"** menu on the left side of the Wave application UI and click **"Operator Panel"** to access the management platform.

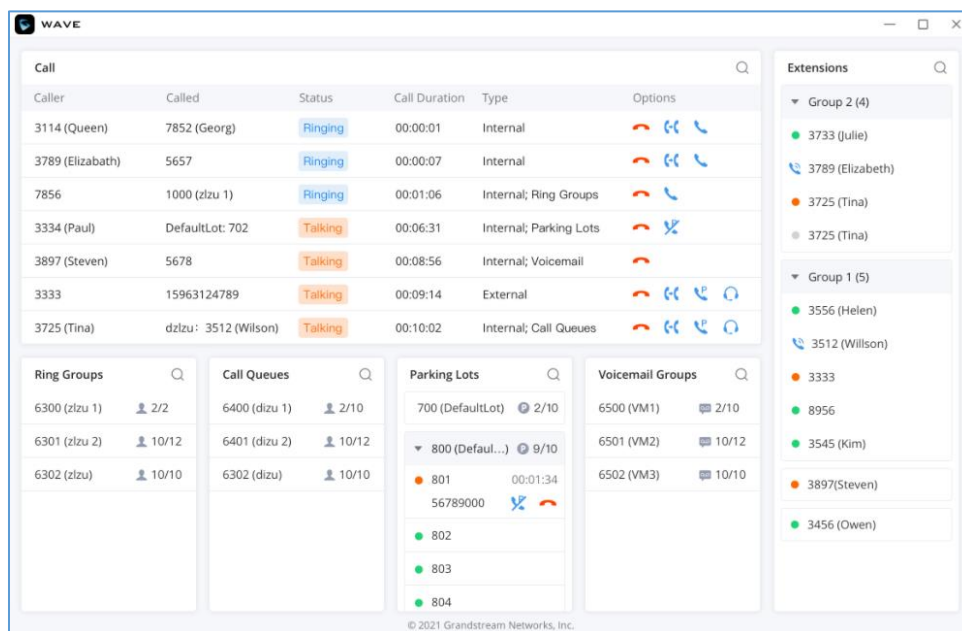


Figure 110: Operator Panel

### Note:

If the user wants to use the Operator Panel function, the user needs to obtain the permission of the calls administrator from the enterprise UCM administrator. For more details, please refer to the User Guide of UCM devices on Grandstream official website.



## Extension

The Extension list will show all extensions and extensions groups you have permission for management, including extensions/extensions group names, and the extension's status.

The administrator can move the mouse over the extension to view the status of the extension, received voicemail amount, and unread voicemail amount.

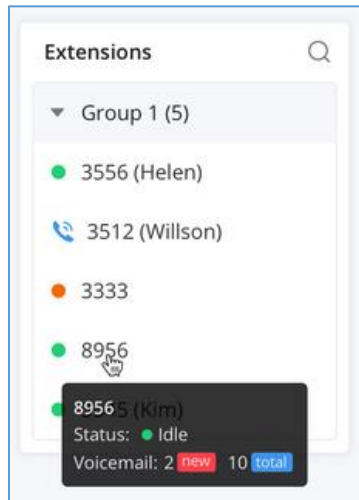






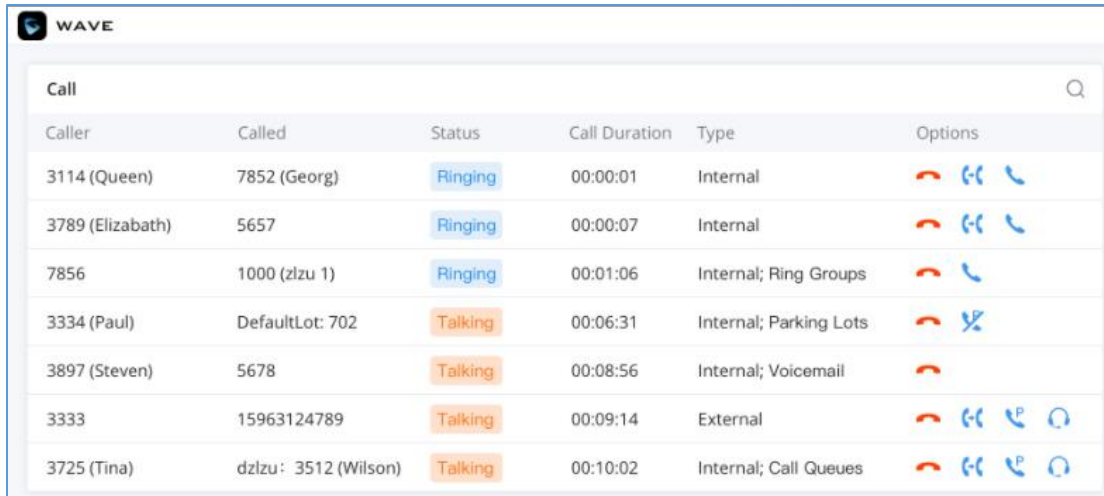
Figure 111: Extension




















-  : Idle
-  : Ringing
-  : Call in progress
-  : Offline

## Call






The Call module displays all calls allocated to local management extensions, ring groups, call queues, parking lots, and voicemail. The administrator can pick up the call, monitor the call, transfer/park/end the call, as the screenshot shows below:






Caller	Called	Status	Call Duration	Type	Options
3114 (Queen)	7852 (Georg)	Ringing	00:00:01	Internal	  
3789 (Elizabeth)	5657	Ringing	00:00:07	Internal	  
7856	1000 (zlzu 1)	Ringing	00:01:06	Internal; Ring Groups	 
3334 (Paul)	DefaultLot: 702	Talking	00:06:31	Internal; Parking Lots	 
3897 (Steven)	5678	Talking	00:08:56	Internal; Voicemail	
3333	15963124789	Talking	00:09:14	External	   
3725 (Tina)	dzlu: 3512 (Wilson)	Talking	00:10:02	Internal; Call Queues	   

**Figure 112: Call Module**

-  : **Call Pickup**. Users can click the button to answer the call.
-  : **Monitoring**. Users can click the button to monitor the call, including Call Monitoring, Whisper Monitoring, and Barge Monitoring.
-  : **Transfer**. Users can click the button to transfer the call, including Blind Transfer and Attended Transfer.
-  : **Call Park**. Users can click the button to park the call to the corresponding parking lot.
-  : **End**. Users can click the button to end the call.

## Call Pickup

When one of the managed extensions receives an incoming call and the call is not answered, the administrator can pick up the call on Operator Panel.

**Step 1:** The user can click  button to pick up the ringing call on the Operator Panel. The system will transfer the call to the administrator.

**Step 2:** The call is answered in the administrator's client successfully.



3114 (Queen)	7852 (Georg)	Ringing	00:00:01	Internal	
3789 (Elizabeth)	5657	Ringing	00:00:07	Internal	

**Figure 113: Call Pickup**

**Note:**


The call pickup permission needs to be assigned in the UCM management platform → Call Features → Feature Codes → Feature Codes and enable the “Pickup on Ringing Prefix” option, the default setting is “\*\*.” The UCM administrator can modify this option from UCM Web UI. Once the option is enabled, the administrator can pick up all calls of managed extensions.

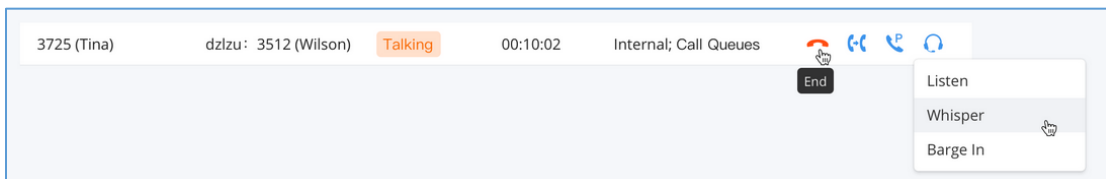
**Monitoring**

The monitoring methods include Call Monitoring, Whisper Monitoring, and Barge Monitoring. The administrator can select to monitor the calls based on different service scenarios.

- **Call Monitoring:** The administrator can monitor the call directly. The line of the administrator will be muted, both caller and callee cannot hear the audio from the administrator.
- **Whisper Monitoring:** The administrator can select to join the caller or callee side to assist the caller or callee through the call. Only the monitored extension can hear the audio from the administrator during the call.
- **Barge Monitoring:** The administrator can join the call to assist the caller and callee through the call. Both caller and callee can hear the audio from the administrator.

**Step 1:** On the Operator Panel, select the call which the user wants to monitor.

**Step 2:** Click on  button, and select the monitoring method between Call Monitoring, Whisper Monitoring, and Barge Monitoring. As the screenshot shows below:

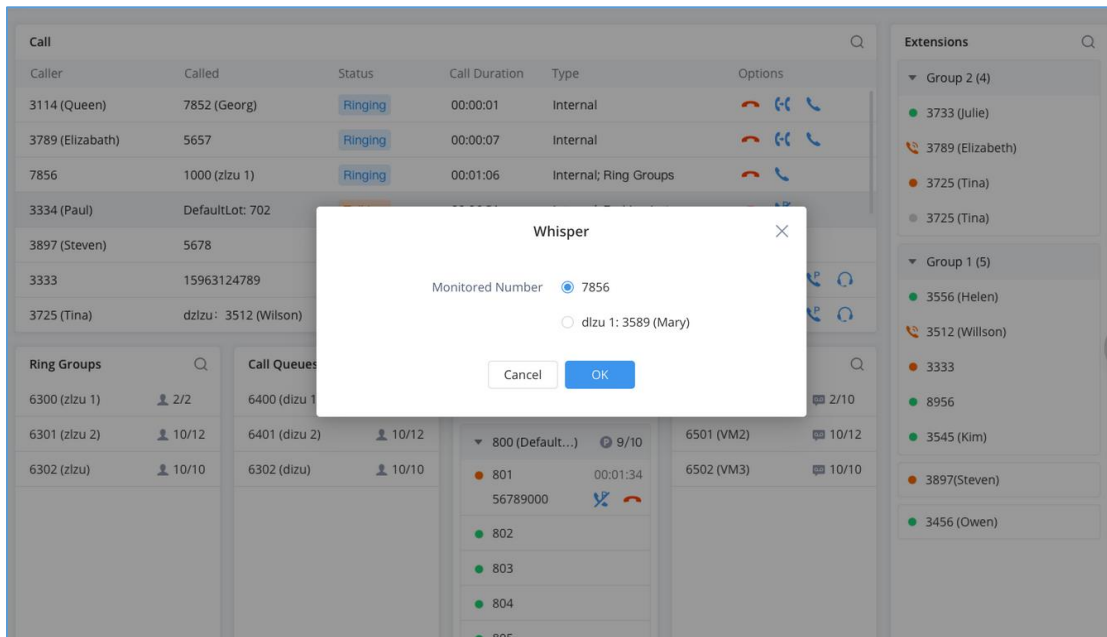


**Figure 114: Monitoring**

**Step 3:** Click the Call Monitoring button or Barge Monitoring button, the administrator will receive the incoming call from the caller’s extension, and the administrator can click the answer button to pick up the call.



**Step 4:** Click the Whisper Monitoring button to select the monitored extension from the popup window. As the screenshot shows below:



**Figure 115: Whisper Monitoring**

**Step 5:** The user can click the “OK” button, and the system will send an incoming call to the administrator’s extension.


**Step 6:** Once the administrator’s extension receives the incoming call from the monitored extension, the administrator can click the answer button to monitor the call.

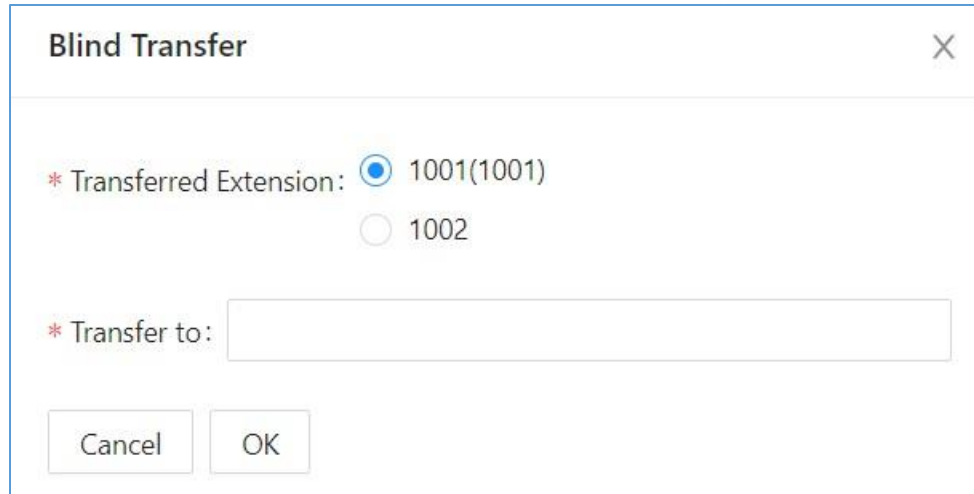
## Transfer

The administrator can transfer the selected calls via Operator Panel, including Blind Transfer and Attended Transfer.

### Blind Transfer

**Step 1:** There is a call that is in progress between extensions 1001 and 1002.

**Step 2:** The administrator can select the call and click  button following the call, select Blind Transfer, and select the transferred extension 1001 as the screenshot shows below:



**Figure 116: Blind Transfer**

**Step 3:** Enter the transferring target extension 1003 in the “**Transfer to**” field and click the “**OK**” button.


**Step 4:** Extension 1003 will receive the new incoming call from extension 1001.

**Step 5:** The call between extensions 1001 and 1002 will be ended. The call between extensions 1001 and 1003 will be established. The Blind Transfer is successful.

On the Operator Panel, the administrator can drag the call to Ringing Group, Call Queue, or Voicemail Group to blind transfer the call to these groups.

#### *Attended Transfer*

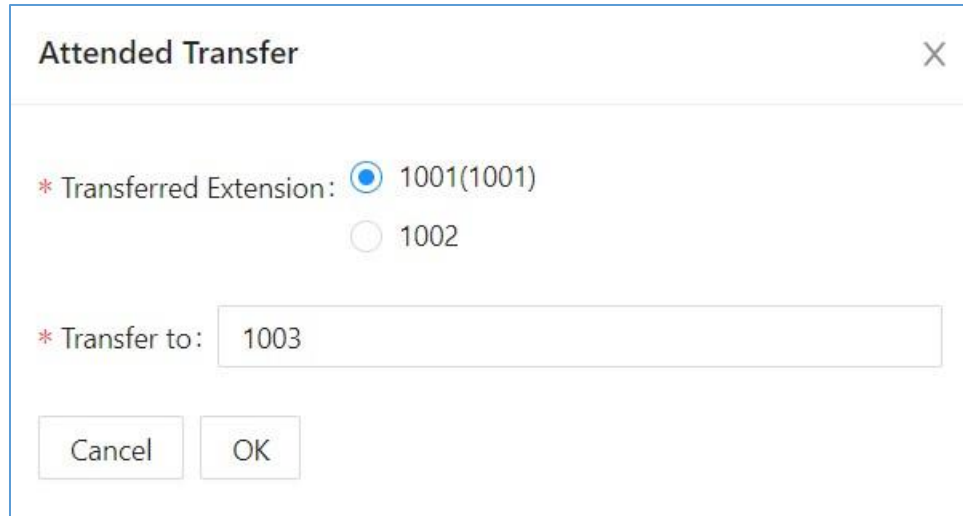
**Step 1:** There is a call that is in progress between extensions 1001 and 1002.

**Step 2:** The administrator can select the call and click  button following the call, select Attended Transfer, and select the transferred extension 1001 as the screenshot shows below.

**Step 3:** Enter the transferring target extension 1003 in the “**Transfer to**” field and click the “**OK**” button.

**Step 4:** Extension 1003 will receive the new incoming call from extension 1002. The call of extension 1001 will be held. The call between extensions 1002 and 1003 will be established. Once extension 1003 hangs up, the call between extensions 1001 and 1002 will be resumed.





**Attended Transfer** [X]

\* Transferred Extension:  1001(1001)  
 1002

\* Transfer to:

Cancel OK

**Figure 117: Attended Transfer**

**Note:**

When the administrator tries to transfer the call to a call queue, the UCM administrator needs to check the “Enable Feature Codes” option in the UCM Web UI → Call Features → Call Queue → Advanced Settings → Other Settings. Otherwise, the call queue members cannot be transferred. For more details, please refer to the UCM User Guide on Grandstream's official website.

## Call Park/Retrieve


The administrator can park the calls and retrieve the calls through Operator Panel.

### Call Park

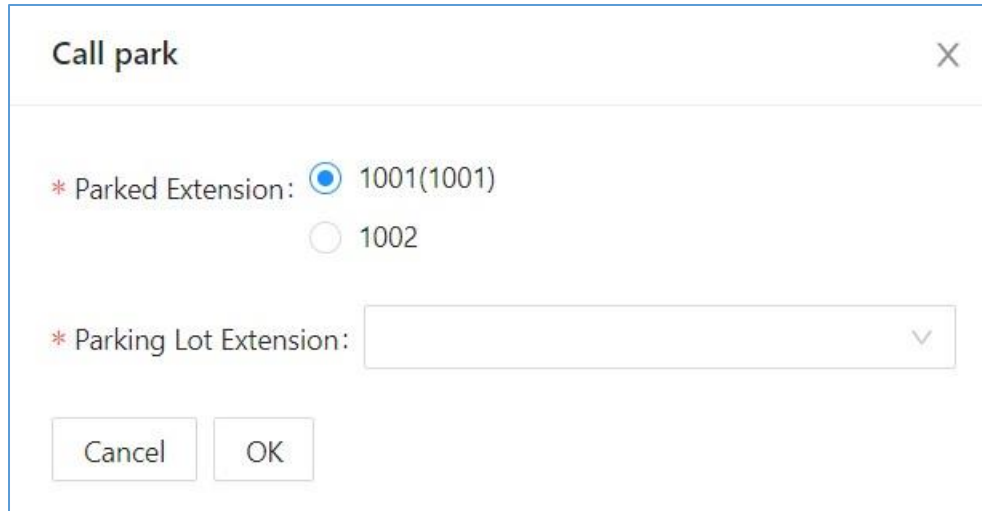
There are two methods to park calls.

**Method 1:**

**Step 1:** Select the call in Operator Panel which the user wants to park.

**Step 2:** Click  button and there will be a popup window to allow the user to select the parked extension, as the figure shows below:





**Figure 118: Call Park**

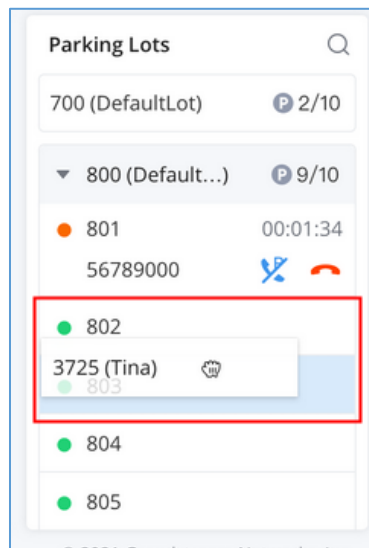
**Step 3:** Select the Parked Extension and Parking Lot Extension.

**Step 4:** Click the “OK” button to park the call to the idle parking lot.

**Method 2:**

**Step 1:** Select the call in Operator Panel which the user wants to park.

**Step 2:** Drag the call to the idle parking lot on the Parking Lot list directly to park the call.



**Figure 119: Drag to Park Calls**

**Note:** If the UCM administrator does not check the option “Use Parking Slot as Extension,” the user can only park the call to the parking lot extension, the parking slots including the parking extensions will not be displayed, the parking lot extension will be randomly assigned. For more details, please refer to the User Guide of UCM device on Grandstream's official website.




## Call Retrieve

There are 2 methods to retrieve the parked calls.

### Method 1:

**Step 1:** Select the call which the user wants to retrieve in the Operator Panel.

**Step 2:** Click  button, the call will be retrieved in the administrator's Wave account.




56789000	DefaultLot: 801	Talking	00:01:34	Internal; Parking Lots	
3334 (Paul)	DefaultLot: 702	Talking	00:06:31	Internal; Parking Lots	

Figure 120: Retrieve Parked Call

**Step 3:** The administrator can click to answer the call to retrieve the parked call.

### Method 2:

**Step 1:** Select the parked call which the user wants to retrieve from a busy parking lot.

**Step 2:** Click  button, the call will be retrieved in the administrator's Wave account. As the screenshot shows below:

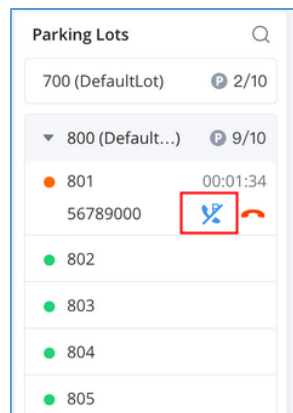


Figure 121: Retrieve Parked Call from Parking Lot







## End Call

**Step 1:** Select the call which the user wants to end in Operator Panel.

**Step 2:** Click  button and click the "OK" button to end the call. As the screenshot shows below:

**Step 3:** The current call will be ended.



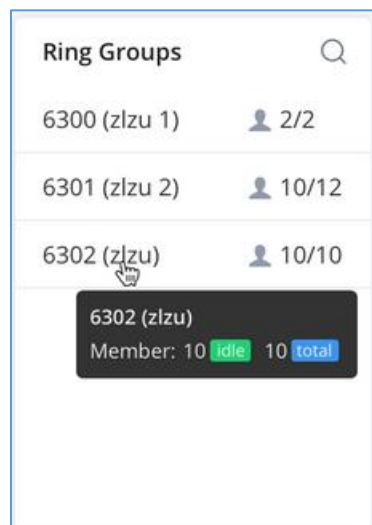
Caller	Called	Status	Call Duration	Type	Options
3114 (Queen)	7852 (Georg)	Ringing	00:00:01	Internal	  
3789 (Elizabeth)	5657	Ringing	00:00:07	Internal	  

**Figure 122: End Call**

## Ringling Group

The Ringling Group panel will show the information of each ringling group, including the number of free members and the total number of members.

The administrator can search the ringling group by number or name.



Ring Groups	Members
6300 (zlzu 1)	2/2
6301 (zlzu 2)	10/12
6302 (zlzu)	10/10

6302 (zlzu)  
Member: 10 idle 10 total

**Figure 123: Ringling Group**

### Note:

The UCM administrator can add the ringling group in the UCM Web UI -> Call Features -> Ring Groups.

## Call Queue

The Call Queue panel shows the information of each call queue, including the number of free members and the total number of members.

The administrator can search the call queue by number or name.





Call Queues	
6400 (dizu 1)	2/10
6401 (dizu 2)	10/12
6302 (dizu)	10/10

**Figure 124: Call Queue**

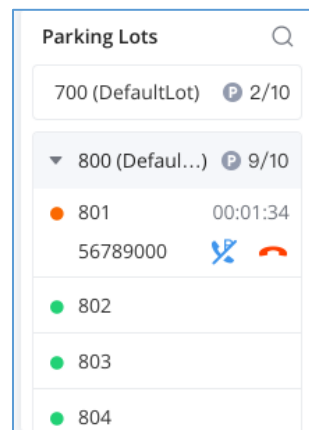
**Note:**



The UCM administrator can add the ringing group in the UCM Web UI -> Call Features -> Call Queue.

**Parking Lot**

The Parking Lot panel shows the status of each parking lot (parking extension).

If the parking lot is busy, the administrator can view the parking period, parking call information, and the administrator can also end/retrieve the parked call. As the screenshot shows below:



Parking Lots	
700 (DefaultLot)	2/10
▼ 800 (Defaul...)	9/10
● 801	00:01:34
56789000	 
● 802	
● 803	
● 804	

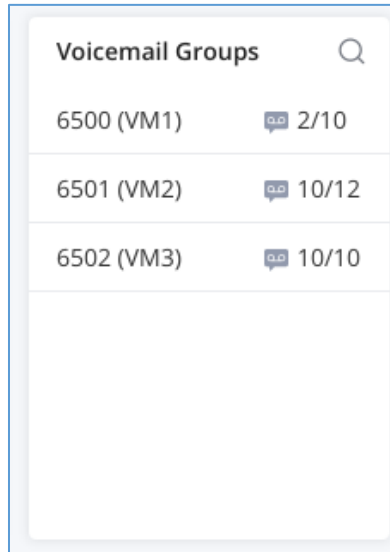
**Figure 125: Parking Lot**

**Note:** The UCM administrator can check the option “Use Parking Slot as Extension” in the UCM Web UI so that the Operator Panel user can select the parking extension and view each parking lot status on the extended parking extensions list.

## Voicemail Group

The Voicemail Group panel shows the status of each voicemail group, including the name and number of each voicemail group, and unread voicemail amount, and total voicemail amount.

The administrator can search the voicemail group by number or name.



Voicemail Groups	
6500 (VM1)	2/10
6501 (VM2)	10/12
6502 (VM3)	10/10

Figure 126: Voicemail Group

**Note:** The UCM administrator can add the voicemail group in the UCM Web UI → Call Features → Voicemail → Voicemail group.



## LOGO CUSTOMIZATION

UCM needs to connect to GDMS, so an open beta plan package for RemoteConnect will be assigned to it to start with.

Once done, the administrator can log in to the UCM management platform and customize the Wave LOGO, please refer to the UCM RemoteConnect user guide for details:

[https://www.grandstream.com/hubfs/Product\\_Documentation/UCM63xx\\_RemoteConnect\\_User\\_Guide.pdf](https://www.grandstream.com/hubfs/Product_Documentation/UCM63xx_RemoteConnect_User_Guide.pdf)

After customizing the logo, all Logos on the Wave page are displayed as customized Logos.

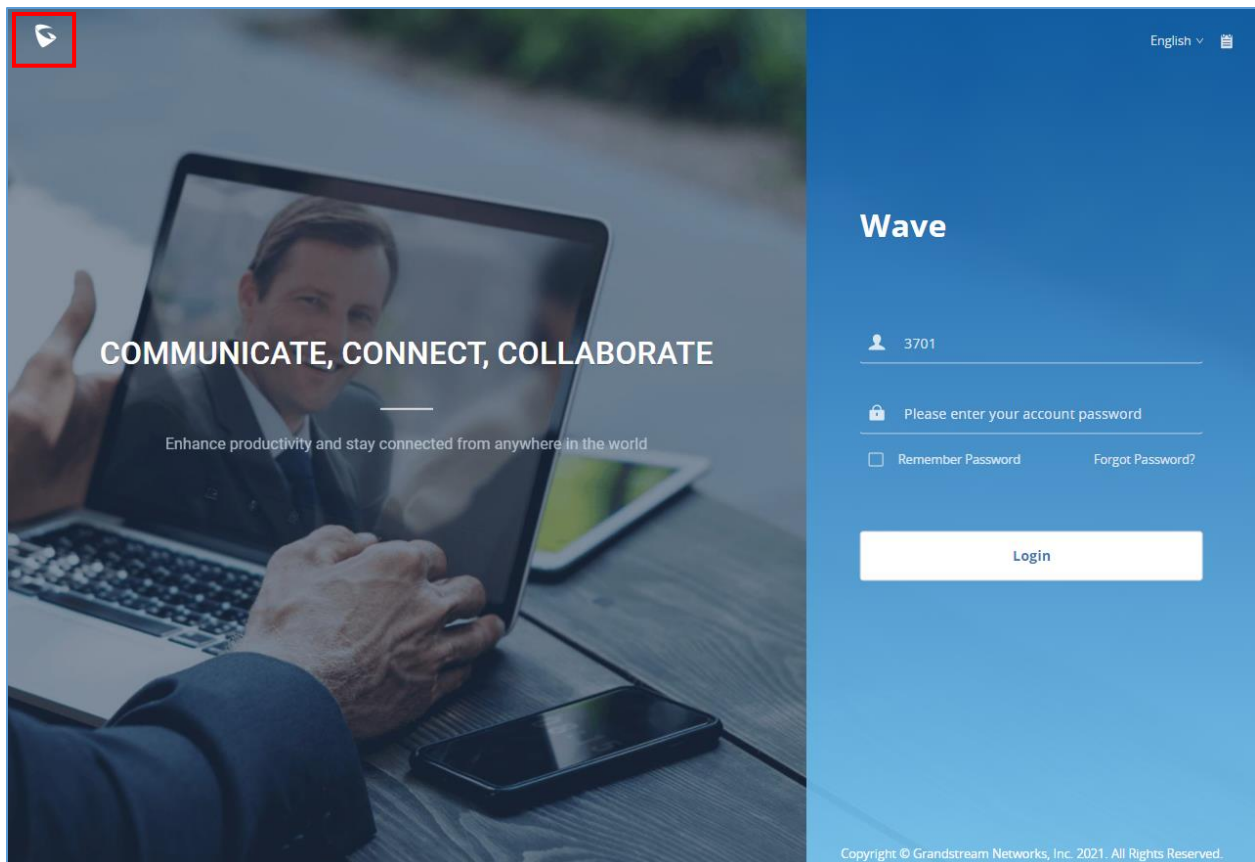


Figure 127: Customized Logo Interface